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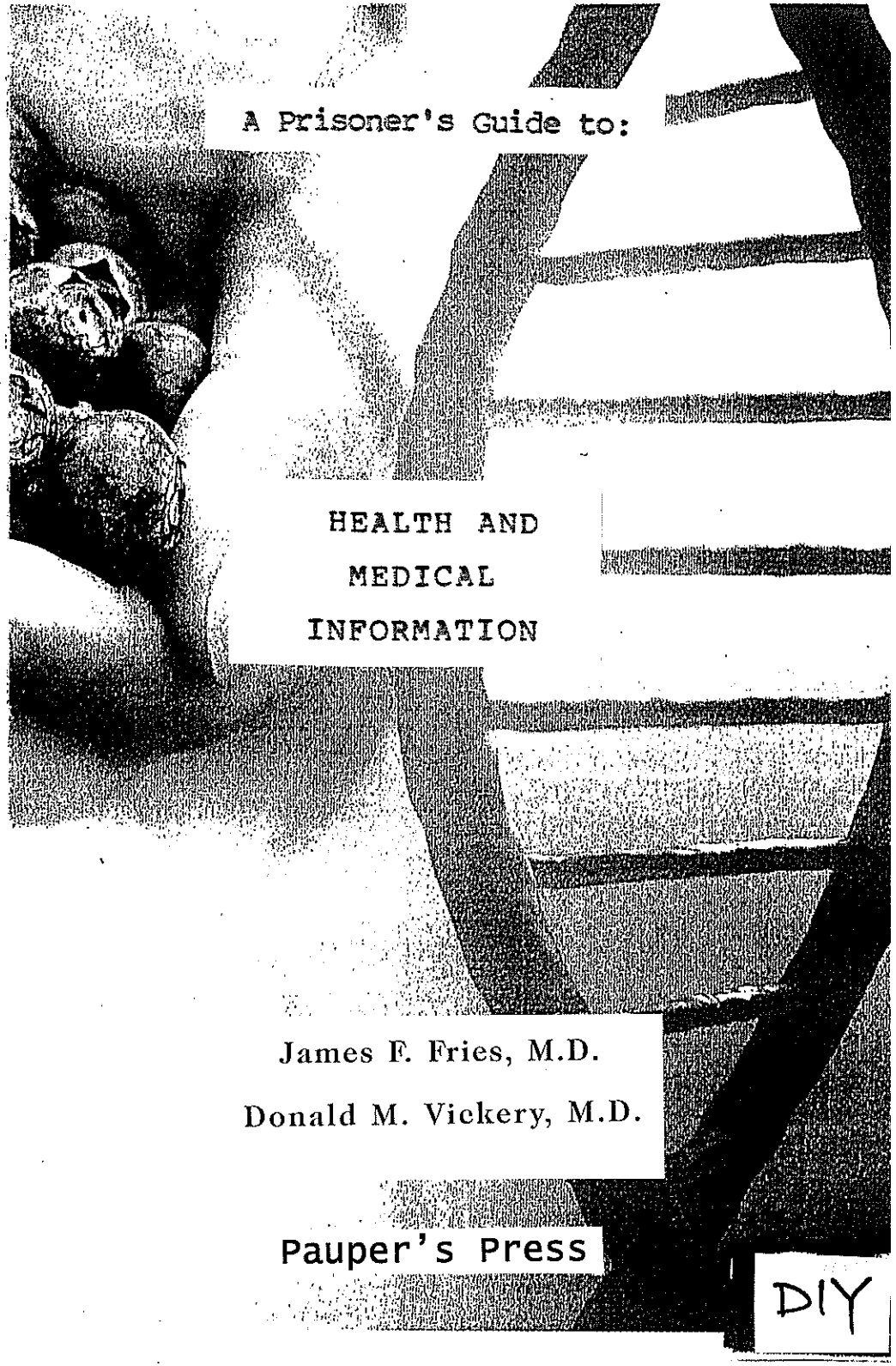

A Prisoner's Guide to:

HEALTH AND MEDICAL INFORMATION

James F. Fries, M.D.

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Pauper's Press

DIY

A special thanks and endless gratitude go to Doctors James F. Fries, M.D. and Donald M. Vickery, M.D., without whom the volumes of this Medical health information series for prisoners would not be possible. Nothing in these volumes is meant to replace being treated by a doctor or being seen by a nurse. The information herein is provided as an educational resource only, and is based on current medical knowledge.

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The following is a general guide for which eye doctor should be seen for the complaint:

- Sudden blindness in one eye in an elderly person: Opthalmologist or internist: possible stroke or temporal arteritis.
- Halos around lights and eye pain: Opthalmologist Possible acute glaucoma [increased pressure in the eye].
- Gradual decrease in vision in an adult who wears glasses: Opthalmologist or optometrist: Change in refraction of the eye.
- Gradual blurring of vision in an older person, with no improvement by moving closer or farther away: Opthalmoloagist: possible cataract [scar tissue forming in the lens of the eye].
- Older person who sees far objects best: Optometrist or opthalmologist: Possible presbyopia [condition that diminishes the eye's ability to focus on near objects].
- Visual change while taking a medicine: See the doctor, the medicine may be the cause.
- Decreased vision in one eye, with a 'shadow' or 'flap' in the visual field. Opthalmologist: possible detachment.

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DECREASED VISION

Few people need urging to protect their sight. Decreased vision is a major threat to the quality of life. Usually professional help is needed.

A few situations don't require a visit to a health professional. When small, single 'floaters' drift' across the eye from time to time and don't affect vision, they aren't a matter for concern. Slight, reversible blurring of vision may occur after outdoor exposure or with overall fatigue.

Usually the question is not whether to see a health professional but, rather, which one to see. The medical department will schedule an appointment for you with the proper eye doctor, but the following will be a general guide to their differences:

- Opticians dispense glasses; they aren't medical doctors and don't diagnose eye problems.
- The optometrist evaluates the need for glasses, screens for eye disease, and determines what prescription lens gives the best vision. Conditions usually treated by an optometrist are nearsightedness [myopia], farsightedness [hyperopia], and crooked-sightedness [astigmatism]. Although optometrists aren't medical doctors, in some states they can prescribe medicine.

If another problem is suspected, the optometrist may refer you to an opthalmologist, who is a medical doctor and a surgical specialist. The opthalmologist is the final authority in eye diseases. Sometimes an eye problem is part of a general health problem; in these cases, the primary physician may be appropriate.

don't recommend cell treatment. In these instances, resting the eyes, taking a few acetaminophen, and avoiding bright light may help. When the symptoms persist request to see the doctor.

PAIN AND FEVER MEDICATIONS

Purpose:

To relieve pain and to lower fever. There are four major over the counter drugs that do these tasks: acetaminophen, aspirin, ibuprofen, and naproxen. Acetaminophen is the safest; the other three can cause severe or even fatal bleeding of the stomach, although only rarely if just a few tablets are taken. On the other hand, acetaminophen doesn't reduce inflammation; aspirin, ibuprofen, and naproxen do, if taken in substantial dosage. Ibuprofen and naproxen are better than the other two for relief of menstrual cramps.

Most of the time, a pain reliever maker conceals the key drug in the pain relief medication somewhere in the find print under 'active ingredients,' and refers obliquely to the amount of analgesic, or pain reliever, present in each tablet. It's often surprisingly hard to find out what is in the drug from the box. There are really only four drugs, and many manufacturers. Each company wants its product to seem unique in a crowded marketplace, so companies develop many minor variations on a similar theme and try to develop distinctive advertising.

For example: Anacin is aspirin and caffeine - caffeine improves pain relief but may make you jittery; Anacin 3 is acetaminophen; Excedrin is half aspirin and half acetaminophen. Some pain relievers include other ingredients. for example, an antacid may be added, as in Bufferin or Ascriptin, in an attempt to cut down on stomach distress. Other than these variations, there's little medical reason to prefer one product over another in most cases. If you like a particular formulation, use it.

On some pain reliever bottles you may see the initials U.S.P., which stand for United States Pharmacopoeia. this means the drug has met certain standards in composition and physical

characteristics. The same is true for the designation N.F., which stands for National Formulary.

finally, remember that acetaminophen, ibuprofen, and naproxen are available by doctor prescription at up to twice the strength of the nonprescription formulas. If you have one of them prescribed in the stronger dosage, don't confuse it with the weaker over the counter formula.

ACETAMINOPHEN

Acetaminophen is available in several brand name preparations - Tylenol, Datril, LIquiprin, Tempra, etc. In some European countries it is known as paracetamol. Acetaminophen is a good choice for some: It's slightly less predictable than aspirin, somewhat less powerful, and doesn't have the anti-inflammatory action that makes aspirin valuable in treatment of arthritis and some other diseases. On the other hand, it doesn't cause ringing in the ears or upset stomach, which are common side effects with aspirin. Nor can it cause Reye's syndrome,a rare but serious side effect of aspirin when taken by children with chicken pox or the flu.

DOSAGE: Acetaminophen is used in doses identical to those of aspirin. For adults, two 325 mg tablets every three to four hours is standard. There's never a reason to exceed these doses because there's no additional benefit in taking higher amounts.

SIDE EFFECTS: Some studies have shown impaired liver function with use of acetaminophen. This is not such a great occurrence that the drug is labeled with warnings nor does there seem to be concern for those who occasionally use this drug.

ASPIRIN

Expensive aspirin preparations may use coated tablets for easier swallowing or they may dissolve faster, but this usually doesn't make them more effective than cheaper brands.

Pain in the eye can be an important symptom and can't be safely ignored for long. Fortunately it is an unusual complaint. In itching and burning are more common. Eye pain may be due to injury, infection, or an underlying disease.

An important disease that can cause eye pain is glaucoma. Glaucoma may slowly lead to blindness if not treated. In glaucoma, the fluid inside the eye is under abnormally high pressure, and the globe of the eye is tense, causing discomfort. Vision to the sides is the first to be lost. Gradually and almost imperceptibly, the field of vision narrows until the individual has 'tunnel vision.' In addition, a person often will see 'halos' around lights. Unfortunately, this sequence can occur even when there is no associated pain.

Eye pain is a nonspecific complaint, and questions relating to the pain are often better answered under the more specific headings in this

A feeling of tiredness in the eyes or some discomfort after a long period of fine work [eyestrain] is generally a minor problem and doesn't really qualify as eye pain. Severe pain behind the eye may result from migraine headaches, and pain either above or below the eye may suggest sinus problems.

Pain in both eyes, particularly upon exposure to bright light, 'photophobia,' is common with many viral infections such as the flu and will go away as the infection imp roves. More severe photophobia, particularly when only one eye is involved, may indicate inflammation of the deeper layers of the eye and requires a doctor.

CELL TREATMENT: Except for eye pain associated with a viral illness or eyestrain, or minor discomfort that is more tiredness than pain, we

layers of gauze, ideally; and tape it firmly in place; you want some gently pressure on the eye.

Check vision each day; compare the two eyes by reading different sizes of newspaper type from across the room, first with one eye, then with the other. If you aren't sure all is well, see the doctor.

If an aspirin bottle contains a vinegary odor when opened, the pills have begun to deteriorate and should be discarded. Aspirin usually has a shelf life of about three years, although shorter periods are sometimes quoted.

DOSAGE: In adults, the standard for pain relief is two tablets taken every three to four hours as required. The maximum effect occurs in about two hours. Each standard tablet is 5 grains, or 325 mg. The terms 'extra strength,' 'arthritis pain formula,' and the like merely indicate a greater amount of aspirin per tablet. This is medically trivial. You can take more tablets of the cheaper aspirin and still save money. When you read that a product 'contains more of the ingredient that doctors recommend most,' you may be sure that the product contains a little bit more aspirin per tablet; perhaps 400 to 500 mg instead of 325.

Here are some hints for good aspirin usage: Aspirin treats symptoms, it doesn't cure problems. Thus, for symptoms such as headache or muscle pain or menstrual cramps, don't take it unless you hurt. On the other hand, for control of fever, you'll be more comfortable if you repeat the dose every four hours during the day because this prevents fever from moving up and down. The afternoon and evening are the worst for fever, so try not to miss a dose during these hours. If you need aspirin for relief from some symptom over a prolonged period, check the symptom with your doctor. Relief from pain or fever is not improved if you increase the dose, and you're more likely to irritate your stomach, so take only the standard dose - 650 mg every 4 hours - even if you still have some discomfort.

To control inflammation, as in serious arthritis, the dose of aspirin must be high often 16 to 20 tablets per day, and must continue over a prolonged period. A doctor should monitor such treatment; it's relatively sage but problems sometimes occur.

Aspirin is also used to prevent heart attacks and is also used to prevent complications of high blood

pressure in pregnant women. The dose for this use is very low: 81 mg - one baby aspirin - usually every other day. Ask your doctor before trying it.

SIDE EFFECTS: Serious gastrointestinal hemorrhage or a perforated, ruptured, stomach can occur; aspirin more than doubles your risk of a bleeding ulcer. If your stomach is upset, try taking aspirin a half-hour after meals, when the food in the stomach will act as a buffer. Coated aspirin, such as Ecotrin, can help protect the stomach. However, some people don't digest coated aspirin and so receive no benefit. Buffers are sometimes added to aspirin to protect the stomach and may help a little. If you take a lot of aspirin and want a buffered preparation, try one with a non-absorbable antacid.

Asthma, nosal polyps, deafness, serious bleeding from the digestive tract, ulcers, and other major problems have been associated with aspirin.

IBUPROFEN

Ibuprofen - Advil, Motrin, Nuprin, etc - has long been used as a drug for arthritis and is approved for pain and fever. Ibuprofen is about as toxic to the stomach as aspirin, and more so than acetaminophen. It doesn't cause ringing of the ears like aspirin or severe liver disease like acetaminophen, in some cases,. It appears to be almost impossible to commit suicide by overdose with ibuprofen. But concern has been raised about kidney problems - mild and reversible - and ibuprofen is sometimes more expensive than the alternatives. It's the best over the counter preparation for menstrual cramps.

DOSAGE: Ibuprofen is standard in 200 mg tablets, and the maximum recommended dose is 1.200 mg - six tablets - per day. This is about one half the recommended dose for the prescription equivalent, but this dose is effective for minor problems and shouldn't be exceeded without a doctor's advice.

FOREIGN BODY IN EYE

Eye injuries must be taken seriously. If there's any question, visit the doctor. A foreign body in the eye must be removed to avoid the threat of infection and loss of sight. Be particularly careful if the foreign body was caused by metal striking metal; a small metal particle can strike the eye with great force and penetrate the eyeball.

Under certain circumstances, you may treat this problem yourself. If the foreign body was minor, such as sand, and didn't strike the eye with great velocity, it is easily removed. Small round particles like sand rarely stick behind the upper eyelid for long.

In fact, the foreign body may not even be in the eye any more; it may simply feel as if it is. This feeling indicates that there has been a scrape or cut on the cornea, the clear membrane that covers the colored portion of the eye. A minor corneal injury will usually heal quickly without problems, but a major one requires medical attention.

Even if you think the injury is minor, run

Minor problems will heal within 48 hours; the eye repairs injury quickly.

CELL TREATMENT: Be gently. Wash the eye out. Water is good.

Inspect the eye yourself and have someone else check it as well. Use a good light and shine it from both the front and the side. Pay particular attention to the cornea.

Don't rub the eye; if a foreign body is present, you will scratch the cornea.

An eye patch will relieve pain. Take it off each day to recheck the eye; it is usually needed for 24 hours or less. Make the patch with several layers of gauze, ideally, and tape it firmly in place; you want some gentle pressure on the eye.

infirmary.

Nosebleeds are more common in the winter when viruses and dry, heated interiors are common. A cooler house and humid air help many people.

If nosebleeds are a recurrent problem, are becoming more frequent, and aren't associated with a cold or other minor irritation, a doctor should be consulted. A doctor need not be seen immediately after the nosebleed because examination at that time may simply restart the nosebleed.

SIDE EFFECTS: Gastrointestinal upset is the most frequent problem and is reason to stop or to call the doctor. Serious gastrointestinal hemorrhage or a perforated stomach can result. The rare patient with aspirin allergy may also react to ibuprofen.

NAPROXEN

Naproxen - Naprosyn and Anaprox by prescription ; Aleve, over the counter. Its main advantage is a longer 'half-life' than other pain relievers, so you need to take it only twice a day. It is effective against pain, fever, and inflammation.

DOSAGE: Naproxen comes in 200 mg tablets. Because Naproxen is slightly more toxic to the stomach than ibuprofen, don't take more than three tablets in 24 hours or more than two if you're over 65 years old.

SIDE EFFECTS: Stop taking the drug and see the doctor if you experience gastrointestinal upset.

ANTACIDS

Purpose:

To relieve upset stomach.

NON ABSORBABLE ANTACIDS

Non-absorbable antacids bring fewer bad consequences down the road. Maalox, Gelusil, Mylanta, Di-Gel, and Amphojel are examples of nonabsorbable antacids. They help neutralize stomach acid and thus decrease heartburn, ulcer pain, gas pains, and stomach upset. Because they aren't absorbed by the body, they usually don't upset the acid-base balance of the body and are quite safe.

Almost all these antacids are available and tablet form. For most purposes, the liquid form is superior. It coats more of the surface area of the gullet and stomach than the tablets do. Indeed, if tablets are not well chewed they may be almost worthless. Still, during work or play, a bottle can be cumbersome, and a few tablets may help with midday doses.

ABSORBABLE ANTACIDS

Baking Soda, Alka-Seltzer, Rolaids, and Tums contain absorbable antacids. The main ingredient in these products is sodium bicarbonate - alke-seltzer, baking soda-, dihydroxyaluminum sodium carbonate - Rolaids -, or calcium carbonate - Tums -. These medicines are more powerful acid neutralizers than nonabsorbable antacids, and they come in convenient tablet form. However, they're absorbed through the walls of the stomach, and this may cause problems. Calcium carbonate, though, is an excellent source of supplemental calcium.

READING THE LABELS: Nonabsorbable antacids contain magnesium or aluminum or both. As a general rule, magnesium causes diarrhea and aluminum causes

NOSEBLEEDS

The blood vessels within the nose lie very near the surface, and bleeding may occur with the slightest injury.

Nosebleeds are frequently due to irritation by a cold virus or to vigorous nose blowing. The main problem in this case is the cold, and treatment of cold symptoms will reduce the probability of a nosebleed. If the mucous membrane of the nose is dry, cracking and bleeding are more likely.

Remember these key points:

- You can almost always stop the bleeding yourself;
- The majority of nosebleeds are associated with colds or minor injury to the nose.
- Treatment such as packing the nose with gauze has significant drawbacks and should be avoided if possible;
- Investigation into the cause of recurrent nosebleeds is not urgent and is best accomplished when the nose isn't bleeding.

CELL TREATMENT: The nose consists of a bony part and a cartilaginous part: a 'hard' portion and a 'soft' portion. The area of the nose that usually bleeds lies within the soft portion, and compression will control the nosebleed. Simply squeeze the nose between the thumb and forefinger just below the hard portion of the nose. Pressure should be applied for at least five minutes. The patient should be seated. Holding the head back isn't necessary. It merely directs the blood flow backward rather than forward. Cold compresses or ice applied across the bridge of the nose may help. Almost all nosebleeds can be controlled in this manner if sufficient time is allowed for the bleeding to stop. If it just won't stop and bleeding is major, or course you should to the

underlying problems.

CELL TREATMENT: Observe the glands over several weeks to see if they are continuing to enlarge or if other glands become swollen. The vast majority of swollen glands that persist beyond three weeks aren't serious, but a doctor should be consulted if the glands show no tendency to become smaller. Soreness in the glands will usually disappear in a couple of days; the pain results from the rapid enlargement of the gland in the early stages of fighting the infection. The gland takes much longer to return to normal size than it does to swell up.

Constipation. Different brands are slightly different mixtures of the salts of these two metals. Designed to avoid diarrhea and constipation. A few brands may contain calcium, which may be constipating.

DOSAGE: The standard adult dosage is two tablespoons, 30ml, o9r two well-chewed tablets. The frequency of the dose depends on the severity of the problem. For stomach upset or heartburn, one or two doses will often suffice. For gastritis, several doses a day for several days may be needed. For ulcers, six weeks or more may be needed, with the medication taken as frequently as every hour or so; this type of program should be supervised by a doctor.

If you wish to use baking soda as an antacid, use one teaspoonful, 5 ml, in a glass of water every four hours as needed - but only occasionally. Baking soda is absorbable.

SIDE EFFECTS: In general, the only problem is the effect on the bowel movements. Maalox tends to loosen the stools slightly. Mylanta and Gelusil are about average, and Amphojel and Aludrox, with more aluminum, tend to be more constipating. Aluminum intake has been linked to Alzheimer's disease. Check with the doctor before using these compounds if you have kidney disease, heart disease, or high blood pressure. Some brands contain significant quantities of salt and should be avoided by people on a low salt diet. De-Gel has the lowest salt content of the popular brands.

Be careful if you take baking soda by mouth. First, there's a lot of sodium in it. If you have heart trouble or high blood pressure or are on a low-salt diet, you can get into trouble. Second, if you take baking soda for many months on a regular basis, there's some evidence that it may result in calcium deposits in the kidneys and thus cause kidney damage.

STOMACH ACID BLOCKERS

Tagamet - cimetidine - and Pepcid AC are drugs widely used for stomach ulcers and have been approved for treatment of heartburn. Rather than neutralize stomach acid like actacids, they act to block the body's production of the acid. Most people won't need Tagamet and Pepcid AC, but you can consider them if antacids aren't effective. If you take other medications, check with the doctor before using Tagamet; it can increase the potency of a number of other medications, including some taken for blood thinning - warfarin -, asthma - theophylline -, and seizures. Pepcid AC may be slightly better in this regard. Don't exceed the recommended dose.

SWOLLEN GLANDS

The most common types of swollen glands are lymph glands and salivary glands. The biggest salivary glands are located below and in front of the ears. When they swell, the characteristic swollen jaw appearance of mumps is the result.

Lymph glands play a part in the body's defense against infection. The may become swollen even if the infection is trivial or not apparent, although you can usually identify the infection that is causing the swelling.

- Swollen neck glands frequently accompany sore throats or ear infections. The swelling of a gland simply indicates that it is taking part in the fight against infection.
- Lymph glands in the groin are enlarged when there is infection in the feet, legs, or genital region. These glands are often swollen when no obvious infection can be found.
- Swollen glands behind the ears are often the result of an infection in the scalp. If there is no scalp infection, it is possible that the person currently has or recently had rubella. Infectious mononucleosis [mono] can also cause swelling of the glands behind the ears.

If a swollen gland is red and tender, there may be a bacterial infection within the gland itself that requires antibiotic treatment. Swollen glands otherwise require no treatment because they are merely fighting infections elsewhere. If there is an accompanying sore throat or earache, these should be treated respectively; however the swollen glands are usually the result of viral infections that require no treatment.

If you have noticed one or several glands progressively enlarging over a period of three weeks, a doctor should be consulted. On very rare occasions, swollen glands can signal serious

HOARSENESS

Hoarseness is usually caused by a problem in the vocal cords.

In adults, a virus is most often responsible for the development of hoarseness or laryngitis when no other symptoms are present. As with any symptom of an upper respiratory tract infection, hoarseness may linger after other symptoms disappear.

When hoarseness is mild, the most common cause is cigarette smoke. If persistent hoarseness is not associated with either a viral infection or with smoking, it should be investigated by a doctor. The amount of time to wait before seeing a doctor is controversial; we suggest one month. If you are a smoker, stop smoking and wait one month.

Persistent hoarseness has many causes. The most common are cysts or polyps on the vocal cords. Cancer is also a cause but is relatively rare. Naturally, overuse of the voice may result in hoarseness.

CELL TREATMENT: Hoarseness not associated with other symptoms is resistant to medical therapy. Nature must heal the inflamed area. Humidifying the air with a vaporizer or taking in fluids can offer some relief; however, healing may not occur for several days. Resting the vocal cords is sensible; crying or shouting makes the situations worse.

ANTIHISTIMINES AND DECONGESTANTS

Purpose:

To treat allergy symptoms. Allerest, Chlortrimeton, Sinarest, Actifed, Benedryl, Sudafed, and Dimetapp are among the drugs designed for treatment of minor allergic symptoms. They're similar to the cold compounds described in another chapter, but they less frequently contain pain and fever agents like aspirin, acetaminophen, naproxen, or ibuprofen. Usually, these drug compounds contain an antihistimine and a decongestant agent, and sometimes acetaminophen. These ingredients can be identified from the label.

If you tolerate one of these drugs well and get relief you may continue to take it for several weeks - for example, through a hay fever season - without seeing a doctor. However, the same sort of drug taken as nose drops or nasal spray should be used sparingly and only for short periods.

READING THE LABELS: The decongestant is usually pseudoephedrine or phenylpropanolamine. If the compound name is not familiar to you, the suffix '-ephrine' or '-edrine' usually identifies a decongestant. The antihistimine is often chlorpheniramine, diphenerhydramine, or brompheniramine. If not, the antihistamine is sometimes identified by the suffix '-amine'.

DOSAGE: Take according to product directions. Reduce the dose if you note side effects.

SIDE EFFECTS: These are usually minor and disappear after the drug is stopped or decreased in dose. Agitation and insomnia usually indicate too much of the decongestant. Drowsiness usually indicates too much antihistamine. To a certain degree, these drugs may impair your functioning.

COLD TABLETS

Purpose:

To relieve some symptoms of colds and flu. Coricidin, Actifed, Triaminic, Contac, Dimetapp, and dozens of other products are widely advertised as being effective against the common cold. Surprisingly, many give satisfactory symptomatic relief. Many doctors believe these preparations do not add much to standard treatment with acetaminophen or aspirin and fluids, but some people believe otherwise.

These compounds usually have three basic ingredients. The most important is a fever and pain reducer; acetaminophen, aspirin, or Buprofen. In addition, there is a decongestant drug to shrink the swollen membranes and the small blood vessels, and an antihistamine to block any allergy and to dry mucus.

READING THE LABEL: The decongestant is often pseudoephedrine or phenylpropanolamine. If not, the suffix '-ephrine' or '-edrine' will usually identify the component of the compound. The antihistamine is often chlorpheneramine - Chlor-Trimeton, etc - or diphenhudramine. If not, the antihistimine is usually, but not always, identifiable on the label by the suffix '-amine.'

Occasionally a 'belladonna alkaloid' is added to these compounds to enhance other actions and reduce stomach spasms. In the small doses used, there's little effect from such a drug. It is listed as 'scopolamine,' 'belladonna,' or something similar. Other ingredients that may be listed contribute little. Don't use products with caffeine if you have heart trouble or difficulty sleeping.

These products take the much promoted 'combination of ingredients' approach. As a rule, single drugs are preferable to combinations of drugs, they allow you to be more selective in treatment of symptoms,

CELL TREATMENT: Treatment for wheezing is for temporary relief only. There are no drugs that cure viral illnesses or asthma. Cell treatment is an important part of this approach. However, the doctor's help is needed so that drugs that widen the breathing passages can be used. Intravenous fluids may be required on some occasions.

Asthma tends to occur in families where other members have either asthma, hay fever, or eczema.

Drinking fluids is very important. It's best to drink water, but fruit juices or soft drinks may be used if the person will swallow more. Hydration [drinking more water] will be part of the therapy that the doctor recommends, so you may begin even before you visit the doctor.

A relatively clean and dust free environment is healthy for all people but essential for a person whose allergies cause asthma. Regularly clean any rugs, chairs and other furniture, bedspreads and blankets, and other items that are dust catchers, especially in the sleeping area.

WHEEZING # ASTHMA

Wheezing is the high-pitched whistling sound produced by air flowing through narrowed breathing tubes [bronchi and bronchioles]. It's most obvious when the person breathes out but may be resent when breathing both in and out. Wheezing comes from the breathing tubes deep in the chest, in contrast to the croupy, crowing, or whooping sounds that come from the area of the voice box in the neck. Most often, a narrowing of the breathing tubes is due to a viral infection or an allergic reaction, as in asthma.

Pneumonia can produce wheezing. Occasionally, a foreign body can also produce wheezing. Occasionally, a foreign body may be lodged in a breathing tube, causing a localized wheezing that's difficult to hear without a stethoscope.

Wheezing is commonly associated with emphysema [chronic obstructive pulmonary disease or COPD], and asthma often exacerbates this problem. The irritation of smoking by itself is sufficient to cause wheezing, although almost all smokers have some degree of emphysema and bronchitis as well.

ASTHMA: Asthma is an obstructive lung disease that's most common in children and adolescents. The wheezing in asthma is caused by spasm of the muscles in the walls of the smaller air passages in the lungs. An excess amount of mucus production further narrows the air passages and can aggravate the difficulty in getting the air out.

An asthmatic attack can be triggered by an infection , an emotionally upsetting event, cold air, air pollution, or exposure to an allergen. Common allergens include house dust, pollen, mold, food, and animal dander. Wheezing can follow an insect sting or the use of a medicine; some individuals even wheeze after taking aspirin. Most often, however, there's no clear reason for a particular asthmatic attack.

and consequently you take fewer drugs. The ingredients in combination products are available separately, and these individual products should be considered as alternatives. For example, the major ingredient in combination products is usually aspirin or acetaminophen. Pseudoephedrine is an excellent decongestant and Chlorpheniramine is a strong antihistimine.

Finally, note that the commonly prescribed cold medicines - sudafed, actifed, dimetapp - are really just more concentrated and expensive formulations of the same type of drugs that are available without seeing the doctor.

DOSAGE: Try the recommended dosage. If you feel no effect, you may increase the dosage by one half. Don't exceed twice the recommended dosage. Remember that you're trying to find a compromise between desired effects and side effects. Increasing the dosage gives more chance of increased beneficial effects but it guarantees a greater probability of side effects.

SIDE EFFECTS: Drugs that put one person to sleep will keep another awake. The most frequent side effects of cold tablets are either drowsiness or agitation. The drowsiness is usually caused by the antihistamine component, and the insomnia or agitation results from the decongestant component. You can try another compound that has less or none of the offending chemical, or you can reduce the dose. There are no frequent side serious side effects; the most dangerous is drowsiness if you intend to drive or operate machinery. In rare cases, the 'belladonna' component will cause dry mouth, blurred vision, or inability to urinate. You may experience aspirin's usual side effects - upset stomach, ringing in the ears, or rarely, bleeding from the stomach.

HYDROCORTISONE CREAM

Purpose:

To temporarily relieve skin itching and rashes such as poison ivy and poison oak. Brand names of over the counter hydrocortisone cream include CaldeCORT, Cortizone-10, and Benedryl Itch Relief Cream. "These are strong, local anti-inflammatory preparations; in general, they're as effective as anything that the doctor can prescribe. Used for a short period, these creams are safe and almost totally nontoxic. They'll clear up many minor rashes, but they 'suppress' a condition rather than 'cure' it.

DOSAGE: Rub a very small amount into the rash. If you can see any cream remaining on the skin, you've used too much. Repeat as frequently as needed, which often is every two to four hours.

SIDE EFFECTS: Over the long term, these creams can cause skin atrophy - thinning of the skin - so limit their use to a two-week period. Beyond this time, check with the doctor. Theoretically, these creams can make an infection worse, so be careful about using them if it is possible the 'rash' might be infected. Don't use these creams around the eyes, and don't take them by mouth.

pneumonia, as are 'double pneumonia' and 'walking pneumonia.' So don't panic when you hear 'pneumonia'; it isn't a very precise term.

CELL TREATMENT: When mucus in the breathing tubes is the problem, this may be made thinner and less sticky by several means. Increased humidity in the air will help. A steamy shower may increase humidity. Drinking large quantities of fluids also is helpful for the cough. Guaifenesin - robitussin or naldecon CCX, for example - is sometimes issued by the doctor and may help thin the mucus. Liberal use of such common substances such as pepper and garlic may also help relieve a cough.

Decongestants and / or antihistamines may help if a postnasal drip is causing the cough. Otherwise, avoid drugs that contain antihistamines because they dry the secretions and make them thicker.

Dry tickling coughs are often relieved by cough lozenges or sucking on hard candy.

The cough reflex is one of the body's best defense mechanisms. Irritation or obstruction in the breathing tubes triggers this reflex, and the violent rush of air helps clear material from the breathing tubes. If abnormal material, such as pus, is being expelled from the body by coughing, the cough is desirable. Such a cough is termed 'productive' and usually shouldn't be suppressed.b

Often a minor irritation or a healing area in a breathing tube will start the cough reflex even though there is no abnormal material to be expelled. At other times, mucus from the nasal passages will drain into breathing tubes at night - postnasal drip - and irritate the cough reflex. Such coughs aren't beneficial and may be decreased with cough suppressants.

SMOKER'S COUGH: The smoker's cough bears testimony to the continual irritation of the breathing tubes. Smoke also poisons the cells lining these tubes so mucus can't be expelled normally. Smoker's cough is a sign of deadly diseases yet to come.

VIRUSES AND BACTERIA: Next to smoking, viral infections are the most common causes of coughs. These coughs usually bring up only yellow or white mucus. In contrast, coughs producing mucus that is rusty or green and looks like it contains pus are most likely to be caused by a bacterial infection. Bacterial infections require the doctor's help and antibiotics. Viral infections are not helped by antibiotics and usually run their course within several days.

The term 'pneumonia' is most often used to refer to a bacterial infection of the lung but can be used for viral infection and other problems as well. In fact, a 'chest cold' is a viral

Purpose:

To treat sprains and similar injuries. All elastic bandages - Ace, for example - provide gentle support, but they also act to reduce swelling. The support given is minimal, and it's possible to reinjure the body part despite the bandage. Thus, an elastic bandage isn't a substitute for a splint, a case, or a proper adhesive-type dressing. Perhaps the most important function of these bandages is to remind yourself that you have a problem so that you are less likely to reinjure yourself.

DOSAGE: when wrapping with the bandage, start at the far end of the area to be bandaged and work toward the trunk of the body making each loop a little looser than the one before. Thus, a knee bandage should be tighter below the knee than above, and an ankle bandage should be tighter on the foot than on the lower leg. Many people think that because i bandage is elastic it must be stretched. That's wrong. The stretchability is to allow the person to move. Simply wrap the bandage as you would a roll of gauze.

Continue using the bandage as support well past the time of active discomfort to allow complete healing and to help prevent reinjury, this is usually around six weeks. During the latter part of this period you can stop using the bandage except during activities that will likely stress the injured part. Remember that reinjury is still possible while these bandages are being used.

SIDE EFFECTS: The simple elastic bandage can cause trouble when it is applied too tightly. Problems arise when circulation in the limb beyond the bandage is impaired. The bandage should firm but not tight. The limb shouldn't swell, hurt, or be cooler beyond the bandage. The skin shouldn't have any blue or purple color.

COUGH SYRUPS

Purpose:

Cough medication is a confusing area. with many products from which to choose. To simplify, consider two major categories:

- Expectorants are usually preferable because they liquefy the secretions the body produces while fighting illness and allow the body's defenses to get rid of the bad material by coughing it up more easily.
- Cough suppressants should always be avoided if the cough is bringing up any material or if there's a lot of mucus. In the late stages of a cough, when it's dry and hacking compounds containing a cough suppressant may be useful.

Beware of compounds that contain an antihistimine, which dries mucus and can harm as much as help.

READING LABELS: Guaifenesin - rohitussin, Benylin expectorant, Vicks, etc. - potassium iodide, and several other frequently used chemicals cause an expectorant action.

Cough suppressant action comes principally from narcotics, such as codeine. Over the counter cough suppressants in the United States cannot contain codeine. They often contain dextromethorphan hydrobromide, which is not a carcotic but is a close chemical relative.

Many commercial mixtures contain a little of everything and may have some of the ingredients of the cold compounds as well.

Guaifenesin

Guaifenesin draws more liquid into the mucus that triggers a cough. Thus, the cough medicine liquefies these mucus secretions so that they may be coughed free. The resulting cough is easier and less irritating. For a dry, hacking cough remaining after a cold, the lubrication alone often soothes

and spinal fluid is draining through the nose. Treat the possibility of this situation as an urgent need for the doctor's help.

CELL TREATMENT: Using handkerchiefs or tissues to blow your nose has the great advantage of safely moving mucus, virus particles, and allergens outside the body. A facial tissue has no side effects and costs less than drugs.

If drugs must be used, there are two basic types:

Decongestants: such as pseudoephedrine and ephedrine shrink the mucous membranes and open the nasal passages.

Antihistimines: block allergic reactions and decrease the amount of secretion.

Decongestants make some people overly active. Antihistamines may cause drowsiness and interfere with sleep.

If you choose to treat a runny nose with medication, nose drops are suitable. Saline nose drops and drops containing decongestants are both okay to use.

Complications such as ear and sinus infections may often by prevented by ensuring that the mucus is thin rather than thick and sticky. This helps prevent plugging of the nasal passages. Increasing the humidity in the air with a vaporizer or humidifier helps liquefy the mucus. Heated air inside a house is often very dry;l cooler air contains more moisture. Drinking a large amount of liquid will also help liquefy the secretions. If symptoms persist beyond three weeks, see the doctor.

RUNNY NOSE

The hallmark of the common cold is a runny nose. it's intended by nature to help the body fight the virus infection. Nasal secretions contain antibodies which act against viruses. A runny nose means these secretions are carrying the virus outside the body.

Allergy is also a common cause of runny noses. People whose runny noses are due to an allergy have allergic rhinitis, better known as 'hay fever'. The nasal secretions in this instance are often clear and very thin. People with hay fever will often have other symptoms, including sneezing and itching, and watery eyes. This problem lasts longer than a viral infection, often for weeks or months, and occurs most commonly during the spring and fall when pollen particles or other allergens are in the air. A great many other substances may aggravate allergic rhinitis, including dust, mold, and animal dander.

Another cause of runny noses as well as stuffy noses is prolonged use of nose drops. This problem of too much medication is known as 'rhinitis medicamentosum.' Nose drops containing substances like ephedrine should never be used longer than three days. This problem can be avoided by switching to saline nose drops for a few days.

Complications from a runny nose are due to the excess mucus. The mucus can run into the throat - post nasal drip - and cause a sore throat or a cough that is most obvious at night. The mucus drip may plug the eustacian tube between the nasal passages and the ear, resulting in ear infection and pain. It may plug the sinus passages, resulting in secondary sinus infection and sinus pain.

A very rare, but very serious, cause of a runny nose is a head injury. If a person has a clear discharge that began after a head injury, there is a possibility that a serious injury has occurred

the inflamed area. Guaifenesin doesn't suppress the cough reflex but encourages the natural defense mechanisms of the body. There's controversy over its effectiveness, but it appears to be safe. It isn't as powerful as the codeine-containing preparations, but for routine use we prefer it to prescription drugs. Pepper and garlic, not usually thought of as medicines, have a similar effect and some studies show them to be more effective.

READING THE LABELS: Guaifenesin is also available in combination with decongestants and cough suppressants; the decongestants may carry a '-pe' suffic for 'phenylephrine' and the cough suppressants a 'Dm' for dectromethorphan.'

DOSAGE: Follow directions on the label.

SIDE EFFECTS: No significant problems have been reported.

ANTIFUNGAL PREPARATIONS

Purpose:

To treat fungus infecting the skin. Fungal infections of the skin aren't serious, so treatment isn't urgent. In general the fungus needs moist, undisturbed areas to grow and will often disappear with regular cleansing, drying, and application or powder to keep the area dry. Clean the area twice daily.

If you need a medication, there are effective nontoxic agents available. for athlete's foot, try one of the zinc undecylenate creams or powders, such as Desenex. In difficult cases, tolnaftate - Tinactin, etc - and clotrimazole - Lotrimin, etc - are useful for almost all skin fungus problems, but they are usually more expensive.

DOSAGE: For athlete's foot, use as directed on the label. For other skin problems, selenium sulfide is effective. It's available by prescription ina 2.5% solution but also over the counter in a 1% solution as Selsun Blue shampoo. Use the shampoo as a cream and let it dry on the skin; repeat several times a day to compensate for the solution's weaker strength.

SIDE EFFECTS: There are very few. Selenium sulfide can burn the skin if used to excess, so decrease application if you notice any irritation. Selenium may discolor hair and will stain clothes. Be very careful when applying any of these products around the eyes. Don't take them by mouth.

HEARING LOSS

Problems with hearing may be divided into two bread categories: sudden and slow. If the difficulty in hearing has developed over a short period of time, the problem is usually a blockage in the ear. on the outside of the eardrum, such blockage may be due to the accumulation of wax, a foreign object that the person put in the ear canal, or an infection of the ear canal. On the inside of the eardrum, blockage may occur when fluid accumulates because of an ear infection or allergy.

Some decrease in hearing, especially of the higher frequencies, is normal after the age of 20. If this decrease becomes a problem in later life, it is time to visit the docter. Occasionally, hearing problems will mimic problems with thinking, or understanding, so people will wrongly suspect senility, Alzheimer's disease, or other neurological problems.

CELL TREATMENT: An Accurate ear examination requires a trip to the doctor. However, if you knew for sure that the problem is caused by too much ear wax, you may treat it in the cell. If you have access olive oil: Many people around the world have used a few drops of olive oil in the ear to soften and remove ear wax. Hearing may be severely decreased for an hour or two while the oil coats the inside of the ear and begins to soften the wax. It will eventually cause the wax to more normally flow out of the ear and hearing will return.

Be cautious about removing foreign bodies from ears. Don't try to remove the object unless it is easily accessible and removing it clearly poses no threat of damage to ear structures.. Never use sharp instruments to remove foreign bodies. Many times, trying to remove an object pushes it farther into the ear or damages the eardrum. The doctor has instruments to remove items from the ears without damage to the ear.

steamy shower while shaking the head and swallowing, are sometimes dramatically successful in clearing out mucus.

If symptoms continue past two weeks, see the doctor.

THE DOCTOR: The doctor will examine the ear, nose and throat as well as the bony portion of the skull behind the ears, known as the mastoid. Pain tenderness, or redness of the mastoid means a serious infection.

Therapy will generally consist of an antibiotic and an attempt to open the eustachian tube by medication. Nose drops, decongestants, and antihistamines can be used for this purpose. Antibiotic therapy generally will be prescribed for at least a week while other treatments will usually be given for a shorter period. Be sure to take all of the antibiotic prescribed, and on schedule.

Occasionally fluid in the middle ear will persist for a long period without infection. In this case there may be a slight decrease in hearing. This condition, known as 'serous otitis media,' is usually treated by trying to open the eustachian tube to allow the fluids to drain, it isn't treated with antibiotics. If this condition persists the doctor may resort to insertion of ear tubes in order to establish proper functioning of the middle ear. Placing ear tubes sounds frightening but this is actually a simple and very effective procedure.

CUTS

Most cuts - lacerations - affect only the skin and the fatty tissue beneath it and heal without permanent damage. However, injury to internal structures such as muscles, tendons, blood vessels, ligaments, or nerves can bring permanent damage. Your doctor can decrease this chance. These are the signs that normally call for a cut to be examined by a doctor:

- Bleeding that you can't control with pressure - this is an emergency.
- Numbness or weakness in the limb beyond the wound
- Inability to move fingers of toes

Signs of infection - such as pus oozing from the wound, fever, or extensive redness and swelling - won't appear for at least 24 hours. Bacteria need time to grow and multiply. If these signs do appear, you must consult a doctor.

STITCHES

The only purpose of stitching - suturing - a wound is to pull the edges together to hasten healing and minimize scarring. Stitches injure tissue to some extent, so they aren't recommended if the wound can be held closed without them. Stitching should be done within eight hours of the injury. Otherwise, the edges of the wound are less likely to heal together and germs are more likely to be trapped under the skin.

DIFFICULT CUTS

Unless the cut is very small or shallow, talk with a doctor about cuts in these areas:

- ON the chest, abdomen, or back
- On the face - facial wounds can be disfiguring
- On the palm - hand wounds can be difficult to treat if they become infected.

CELL TREATMENT

Cleanse the wound. Soap and water will do, but be vigorous. If you have 3% Hydrogen Peroxide, or a commercial antiseptic, it's use will be helpful. Make sure no dirt, glass, or other foreign material remains in the wound.

The edges of a clean, minor cut can usually be held together by 'butterfly' bandages or, preferable, by 'steristrips ' - strips of sterile paper tape. Apply either of these bandages so that the edges of the wound join without 'rolling under.'

See the doctor if the edges of the wound can't be kept together, if signs of infection appear - pus, fever, extensive redness and swelling - or if the cut isn't healing well within two weeks.

WHAT TO EXPECT FROM VISITING THE DOCTOR

The wound will be thoroughly cleansed and explored to be sure that no foreign particles are left and that blood vessels, nerves, and tendons are undamaged. Since the doctor may use an anesthetic to numb the area, report any possible allergy to local anesthetics - Xylocaine, for example. The doctor will usually give a tetanus shot and antibiotics if needed.

Lacerations that may require a surgical specialist include those with injury to tendons or major vessels, especially in the hand, and those on the face.

EAR PAIN AND STUFFINESS

Ear pain often is caused by a buildup of fluid and pressure in the middle ear - the portion of the ear behind the eardrum. Under normal circumstances, the middle ear is drained by a short narrow tube, the eustachian tube, into the nasal passages. Often during a cold or allergy, the mucous membranes lining the eustachian tube will swell, closing off the tube; this occurs most easily in small children in whom the tube is smaller. When the tube closes, the normal flow of fluid from the middle ear is prevented, and the fluid begins to accumulate. This causes stuffiness and decreased hearing.

The stagnant fluid provides a good place for the start of a bacterial infection. A bacterial infection usually results in pain and fever, often in one ear only.

Ear pain and ear stuffiness may occur when going from low to high altitudes, as when going up in an airplane. Here again the mechanism for the stuffiness or pain is a clog in the eustachian tube. Swallowing will frequently relieve this pressure. Closing the mouth and holding the nose closed while pretending to blow your nose is another way to open the eustachian tube. Using a decongestant may help prevent this problem.

CELL TREATMENT: Antihistamines, decongestants, and nose drops are used to decrease the amount of fluid flowing from the middle ear and shrink the mucous membranes in order to open the eustachian tube. Fluid in the ear will often respond to cell treatment alone.

Acetaminophen, aspirin, ibuprofen, or naproxen will provide partial pain relief. Although ear

Moisture and humidity are important in keeping the mucus that flows from the middle ear thin. Use a vaporizer if you have one. Curious maneuvers - such as hopping up and down in a

various studies. Furthermore many people are 'strep carriers': they have strep in their throats but the strep isn't causing illness.

CELL TREATMENT: Cold liquids, acetaminophen, aspirin, ibuprofen, and naproxen are effective for sore throat pain and fever. Because recent information indicates an association between aspirin and a rare but serious problem known as Reye's syndrome, young people and teenagers should not take aspirin but adults should not worry. Home remedies that may help include salt water gargles and tea with honey or lemon. Also, iced garlic water has shown remarkable benefit for sore throats in nearly all who have sipped it; the cloves of garlic should be diced and included in a glass with ice, or garlic powder may be used where fresh garlic is not available. One quarter teaspoon of garlic powder equals one fresh clove.

PUNCTURE WOUNDS

Puncture wounds are those caused by nails, pins, and other sharp objects. Usually, the most important question is whether a tetanus shot is needed.

SHOULD YOU SEE A DOCTOR

Most minor puncture wounds are located on the body's extremities: arms, hands, legs, and particularly feet. If the puncture would in located elsewhere, a hidden internal injury may have occurred. See the doctor for advice.

Many Doctors feel that puncture wounds of the hand, if not minor, should be treated with antibiotics. Once started, infections deep in the hand are difficult to treat and may lead to loss of function. Call the doctor for hand wounds other than very minor ones.

Injury to a tendon, nerve, or major blood vessel is rare but can be serious.

- Injury to an artery may be indicated by blood pumping vigorously from the wound.
- Injury to a nerve usually causes numbness or tingling in the wounded limb beyond the site of the wound.
- Injury to a tendon causes difficulty in moving the limb - usually fingers or toes - beyond the wound.

Major injuries such as these occur more often from a nail, ice pick, or large instrument than from a narrow implement such as a needle.

INFECTION: To avoid infection, be absolutely sure that nothing has been left in the wound. Sometimes, for example, part of a needle will break off and remain in the foot. If there's any question of a foreign body remaining, a doctor should examine the wound.

Signs of infection usually take at least 24 hours

to develop. The formation or pus, a fever, and severe redness and swelling are indications that you should see the doctor.

CELL TREATMENT

Clean the wound with soap and water or hydrogen peroxide, if available. Let it bleed as much as possible to carry out foreign material because you can't scrub the inside of a puncture wound. Don't apply pressure to stop the bleeding unless you see a large amount of blood loss or a 'pumping' type of bleeding.

Soak the wound in warm water or a baking soda solution several times a day for four to five days. The object of the soaking is to keep the skin puncture open as long as possible so that any germs or foreign debris can drain from the open wound. If the wound closes, an infection may form beneath the skin but not become apparent for several days.

See the doctor if there are signs of infection or if the wound hasn't healed within two weeks.

SORE THROATS

Sore throats can be caused by viruses or bacteria. Especially in the Winter, breathing through the mouth can dry and irritate the throat. This type of irritation subsides quickly after the throat becomes moist again.

STREP THROAT: Sore throats due to the streptococcal bacteria are commonly referred to as 'strep throat.' A strep throat should be treated with an antibiotic because of two types of complications. First, an abscess may form in the throat. This is an extremely rare complication but should be suspected if a child shows great difficulty in swallowing or opening the mouth, or excessive drooling.

The second and more significant type of complication occurs from one to four weeks after the throat pain disappears and takes one of two forms. One form, called acute glomerulonephritis, causes an inflammation of the kidney. It isn't certain that antibiotics will prevent this complication.

The other form, and the one of greatest concern, is the complication of rheumatic fever, which is rare today but still a problem in some regions. Rheumatic fever is a complicated disease that can result in painful, swollen joints, unusual skin rashes; and heart damage. Rheumatic fever can be prevented by antibiotic treatment of a strep throat.

Strep throat is much less frequent in adults than in children, and rheumatic fever is very rare in adults. Strep throat is unlikely if the sore throat is a minor part of a typical cold - runny nose, stuffy ears, cough, and so on.

The question of when to use antibiotics for sore throats is controversial. Many doctors believe that a test for strep is the best way to determine the need for antibiotics. However the test's accuracy has ranged from 31 to 98% in

REST: How you feel is an indication of your need to rest. If you feel like being up and about, go ahead. It won't prolong your illness, and your friends were already exposed during the incubation period, the three days or so before you had symptoms.

If symptoms persist beyond two weeks, see the doctor.

SCRAPES AND ABRASIONS

Scrapes and abrasions are shallow wounds. Several layers of the skin may be torn or even totally scraped off, but the wound doesn't go far beneath the skin. Abrasions are usually caused by falls onto the hands, elbows, or knees. Because abrasions expose millions or nerve endings, all of which send pain impulses to the brain, they're usually much more painful than cuts.

CELL TREATMENT

Remove all dirt and foreign matter. Washing the wound with soap and warm water is the most important step in treatment. You can also use 3% hydrogen peroxide, if available, to cleanse the wound. Most scrapes will scab rather quickly; this is nature's way of 'dressing' the wound. Using antiseptics does little good and is sometimes painful.

Adhesive bandages may be used a necessary for a wound that continues to ooze blood; they must be removed if they get wet. Antibacterial ointments - Neosporin, Bacitracin, etc.. - are optional; their main advantage is in keeping bandages from sticking to the wound.

Loose skin flaps, if they aren't dirty, may be left to help form a natural dressing. If the skin flap is dirty, cut it off carefully with nail scissors. If it hurts, stop! You're cutting the wrong tissue.

Watch the wound for signs of infection - pus, fever, or severe redness or swelling - but don't be worried by redness around the edges; this is an indication of normal healing. Infection won't be obvious in the first 24 hours; fever may indicate a serious infection.

Pain can be treated for the first few minutes with an ice pack enclosed in a plastic bag or towel applied over the wound as needed. The worst pain

subsides fairly quickly, and acetaminophen or other pain medication can then be used if needed.

WHAT TO EXPECT FROM A DOCTOR

The doctor will make sure that the wound is free of dirt and foreign matter. Soap and water and 3% hydrogen peroxide will often be used. Sometimes a local anesthetic - Xylocaine, for example - is required to reduce the pain of the cleansing process. Tell the doctor of possible allergies to such anesthetics.

An antibacterial ointment such as Neosporin or Bacitracin is sometimes applied after cleansing the wound. Betadine is a painless iodine preparation that is also occasionally used. Tetanus shots aren't required for simple scrapes, but if the patient is overdue, it is a good chance to get caught up.

COLDS AND THE FLU

Most doctors believe that colds and the flu for more unnecessary visits than any other group of problems. Because these are viral illnesses, they cannot be cured by antibiotics or any other drugs. However, there are nonprescription drugs - pain relievers, decongestants, antihistamines - that may decrease symptoms while these problems cure themselves.

There seem to be three main reasons why colds and fly result in unnecessary doctor visits:

- A few patients aren't sure that their illness is a cold of the flu.
- Many come seeking a cure, though there is more.
- Many patients feel so sick that they believe the doctor must be able to do something. Faced with this expectation, doctors sometimes try too hard, giving an antibiotic, performing tests, or taking X-rays that aren't really needed.

Of course, complications from colds and fly do lead to necessary visits as well, most often to treat bacterial ear infections and bacterial pneumonia. In very young children viral infections

CELL TREATMENT: Take two aspirin and call me in the morning. This familiar phrase doesn't indicate neglect or lack of sympathy. Acetaminophen, aspirin, ibyprofen, and naproxen are effective remedies for the fever and muscular aches of the common cold. The fever, aches, and exhaustion are most pronounced in the afternoon and evening, so take medications regularly over this period. Because of the rare but serious problem of the

Drink a lot of liquid. This is insurance. The body requires more fluid when you have a fever. Be sure you get enough. Fluids help to keep the mucus more liquid and help prevent complications such as bronchitis and ear infection.

runny nose as well as combat the sleepiness.

SINUSITIS: Inflammation of the sinuses is often associated with hay fever and asthma. Symptoms include a sense of heaviness behind the nose and eyes, often resulting in a 'sinus headache.' If the sinuses are infected, there may be fever and nasal discharge. Antihistamines and decongestants may be helpful in cases of sinusitis that accompany colds of hay fever. Don't use nasal sprays for more than three days. For recurring sinusitis, see the doctor the determine the precise cause and treatment; antibiotics are frequently prescribed.

STREP THROAT: Bacterial infections tend to localize at a single point. Involvement of the respiratory tract by strep is usually limited to the throat. However, symptoms outside the respiratory tract can occur, most commonly fever and swollen lymph glands - from draining the infection in the neck. A scarlet fever rash sometimes may help to distinguish a streptococcal - strep - from a viral infection. This disorder must be diagnosed and treated because serious heart and kidney complications can follow if adequate antibiotic therapy isn't given.

OTHER CONDITIONS: Factors other than diseases may cause or contribute to upper respiratory symptoms. Smoking is probably the largest single cause of coughs and sore throats. Tumors and other frightening conditions account for only a very small number. Complaints lasting beyond two weeks without one of the common diseases as the obvious cause aren't alarming but should be investigated by the doctor.

TETANUS SHOTS

The question of whether or not a wound is 'clean' and 'minor' may be troublesome. Wounds caused by sharp, clean objects such as knives or razor blades have less of a chance of becoming infected than those in which dirt or foreign bodies have penetrated and lodged beneath the skin. Abrasions and minor burns won't result in tetanus. The tetanus germ can't grow in the presence of air, so the skin must be cut or punctured for the germ to reach an airless location.

IMMUNIZATION

If you've never received a basic series of three tetanus shots, you should see your doctor. Sometimes a different kind of tetanus shot is required if you haven't been adequately immunized. This shot is called 'tetanus immune globulin' and is used when immunization isn't complete and there is a significant risk of tetanus. It is more expensive, more painful, and more likely to cause an allergic reaction than the tetanus booster. So keep a record of your immunizations.

During the first tetanus shots - usually a series of three injections given in early childhood - the person develops a resistance to tetanus over a three - week period. This immunity then slowly declines over many months. After each booster, immunity develops more rapidly and lasts longer. If you have had an initial series of five tetanus injections, immunity will usually last at least ten years after every booster injection. Nerertheless, if a wound has contaminated material beneath the skin and isn't exposed to the air, and if you haven't had a tetanus shot within the past five years, a booster shot is advised to keep the level of immunity as high as possible.

BROKEN BONE

Neither patient nor doctor can always tell by eye whether a bone is broken. Fortunately, in most bone fractures the bone fragments are already aligned and setting isn't required. If the injured part is protected and rested, a delay of several days before casting does no harm. The cast does not 'heal' the break, it only keeps the fragments from getting joggled too much during the healing process.

A fracture that injures nearby nerves and arteries may result in a limb that is cold, blue, or numb. Fractures of the pelvis or thigh may be particularly serious, but they are relatively rare and usually involve great force. In these situations, the need for immediate help is usually obvious.

Paleness, sweating, dizziness, and thirst can indicate shock, and immediate attention is needed.

Although broken ribs are generally diagnosed with X-rays, no particular treatment, other than taping and resting the affected ribs, is indicated. If you experience shortness of breath associated with a chest injury, there may have been an injury to the lung and a visit to the doctor is recommended.

A crooked limb is an obvious reason to check for fracture. Pain that prevents any use of the injured limb suggests the need for an X-ray. Soft tissue injuries, such as painful sprains, usually allow some use of the limb.

Although large bruises under the skin are usually caused by soft-tissue injuries alone, major bruising means a fracture is more likely.

CELL TREATMENT

Apply ice packs. The immediate application of cold will help decrease swelling and inflammation. The limb should be protected and rested for at least 48 hours. To rest a bone effectively, immobilize the joint above and below the bone. For example, if you suspect a fracture of the lower arm, you should

VIRAL URI: This is the 'common cold.' It includes some combination of the following: sore throat, runny nose, stuffy or congested ears, hoarseness, swollen glands, and fever. One symptom usually precedes the others, and another symptom, usually hoarseness or cough, may remain after the others have disappeared.

THE FLU: Fever may be quite high. Headache can be excruciating, muscle aches and pain, especially in the lower back and eye muscles are equally troublesome.

VIRAL GASTROENTERITIS: This is 'stomach flu' with nausea, vomiting, diarrhea, and crampy abdominal pain. It may be incapacitating and can mimic a variety of other more serious conditions, including appendicitis.

HAY FEVER: Allergic rhinitis is commonly called 'hay fever' even though it's not a fever and not caused by hat. It is, however, the most common problem caused by allergies. A stuffy, runny nose, watering itchy eyes, headache, and sneezing are all common symptoms. Hay fever seems to run in families. Patients usually diagnose this condition accurately themselves.

As with viruses, hay fever is treated simply to relieve symptoms. Given enough time, the condition runs its course without doing any permanent harm. Avoiding the offending allergen is often the best preventive action. The cause in infants is often dust or food; in adults, it's dust or pollens.

Antihistimines block the action of histamine, a substance released during allergic reactions. They also have a drying effect on the runny nose and alleviate nasal stuffiness. Some antihistamines are available over the counter. Their most common side effect is drowsiness, and this may interfere with work or school. Decongestants - pseudoephedrine, etc... - can be added to antihistamine medication. They may help with the

EAR, NOSE, THROAT:
Virus, Bacteria or Allergy?

This section discusses upper respiratory problems, including colds and flu, sore throats, ear pain or stuffiness, runny nose, cough, hoarseness, swollen glands, and nosebleeds. A central question is important to each of these complaints: Is it caused by a virus, bacteria, or an allergic reaction? In general, the doctor has more effective treatment only for bacterial infections than what you have available to you. Viral infections and allergies don't improve with treatment by penicillin or other antibiotics. To demand a 'penicillin shot' for a cold or allergy is to ask for a drug reaction, risk a more serious 'superinfection,' and waste time.

Among common problems well treated without a doctor, are:

- The common cold, often termed 'viral URI, [upper respiratory Infection]
- The flu, when uncomplicated
- Hay fever
- Mononucleosis - infections mononucleosis or 'mono'

Medical treatment is commonly required for:

- Strep throat
= Ear infection

Some brief descriptions are offered here to help you tell these conditions apart:

VIRAL SYNDROMES: Viruses usually involve several portions of the body and cause many different symptoms. Three basic patterns, or syndromes, are common in viral illnesses; however, overlap among these three syndromes is not unusual. Your illness may have features of each.

prevent the wrist and elbow from moving. You can use magazines, cardboard, or rolled newspaper as splints. don't wrap the limb tightly or you may cut off circulation. During this 48 hours, the limb should be cautiously tested to determine if the patient can use it at all and if it remains painful when moved.

Any injury that is still painful after 48 hours should be examined by a doctor. Minutes and hours aren't crucial unless the limb is crooked or there is injury to arteries or nerves. A broken limb that is adequately protected and rested is likely to have a good outcome even if casting or splinting is delayed. Acetaminophen, aspirin, ibuprofen or naproxen can be used for pain.

ANKLE INJURIES

Ligaments are tissues that connect the bones of a joint to provide stability during the joint's action. when the ankle is twisted severely, either the ligament or the bone must give way. If the ligaments give way, they may be stretched - strained - partially torn - sprained - or completely torn - torn ligaments. If the ligaments don't give way, one of the bones around the ankle will break - fracture.

Strains, sprains, and even some minor fractures of the ankle will heal well with cell treatment. Some torn ligaments do well without a great deal of medical care; operations to repair them are rare. For practical purposes, the immediate attention of the doctor is necessary only when the injury has been severe enough to cause obvious fracture to the bones around the ankle or to cause a completely torn ligament. This is indicated by a deformed joint with abnormal motion.

SWELLING: The typical ankle sprain swells either around the bony bump at the outside of the ankle or about two inches - 5 cm - in front of and below it. The amount of swelling doesn't differentiate among sprains, tears, and fractures. The common chip fractures around the ankle often cause less swelling than a sprain. Sprains and torn ligaments usually swell quickly because there is bleeding into the tissue around the ankle. The skin will turn blue-black in the area as the blood is broken down by the body.

A swollen ankle t6hat isn't deformed doesn't need prolonged rest, casing or X-rays. Cell treatment should be started promptly. Detection of any damage to the ligaments may be difficult immediately after the injury if much swelling is present. Because it is easier to do an adequate examination of the foot after the swelling has gone down and because no damage is done by resting a mild fracture or torn

Breathing is difficult and accompanied by grunting. There may be nausea, vomiting, headaches, sweating, twitching, shaking, and tinkling sensations of the hands. The bite itself may not be prominent and may be overshadowed by the systemic reaction.

Brown recluse spiders, which are slightly smaller than black widows and have a while violin pattern on their backs, cause painful bites and serious local reactions but aren't as dangerous as black widows.

CELL TREATMENT: Apply something cold, such as ice or cold packs, promptly. Delay in cold applications results in a more severe local reaction. Acetaminophen or other pain relievers may be used. Antihistamines, such as chlorpheniramine or diphenhydramine, can be helpful in relieving the itch somewhat. If the reaction is severe or if pain doesn't diminish in 48 hours, see the doctor.

INSECT BITES OR STINGS

Most insect bites are trivial, but some bites or stings may cause reactions. Local reactions consist of pain, swelling, and redness at the site of the bite or sting. They are uncomfortable but don't pose a serious hazard.

In contrast, systemic reactions -those that involve the whole body- may occasionally be serious and may require emergency treatment. There are three types of systemic reaction. All are rare:

- An asthma attack is the most common, causing difficulty in breathing and perhaps audible wheezing;
- Hives or extensive skin rashes following insect bites are less serious but indicate that a more severe reaction might occur if the patient is bitten or stung again.
- Fainting or loss of consciousness rarely occurs and suggests that the collapse is due to an allergic reaction. This is an emergency.

If the person has had any of these reactions in the past, he or she should be taken immediately to a medical facility if stung or bitten.

If the local reaction to a bite or sting is severe or a deep sore is developing, a doctor should be seen.

SPIDER BITES: Bites from poisonous spiders are rare. The female black widow spider accounts for many of them. This spider is glossy black with a body approximately one half inch - 1 cm - in diameter, a leg span of about two inches - 5 cm - and a characteristic red hourglass mark on the abdomen. The black widow spider is found in woodpiles, sheds, basements, or dark outdoor areas that are mostly undisturbed. the bite is often painless, and the first sign may be cramping abdominal pain. The abdomen becomes hard and boardlike as the waves of pain become severe.

ligament, there is no need to rush to the doctor.

PAIN: Pain tells you what to do and not to do. If it hurts, don't do it. If pain prevents any standing on the ankle after 24 hours, see a doctor. If little progress is being made so that pain makes weight-bearing difficult at 72 hours, see the doctor.

CELL TREATMENT: R.I.P. is the key word: Rest, Ice, Protection.

Rest the ankle and keep it elevated. Apply ice in a towel to the injured area and leave it there for at least 30 minutes. If there is any evidence of swelling after the first 30 minutes, then apply ice for 30 minutes on and 15 minutes off through the next few hours. If the ankle stops being painful while elevated, you may cautiously try to put weight on that leg. If the ankle is still painful when bearing weight, you should avoid putting weight on that let for the first 24 hours. Heat may be applied, but only after 24 hours.

An elastic bandage can help but won't prevent reinjury if you resume full activity. Don't stretch the bandage so that it's very tight and interferes with blood circulation.

If done incorrectly, it may cot off circulation to the foot.

The ankle should feel relatively normal in about ten days. Be warned, however, that full healing won't take place for four to six weeks. If strenuous activity, such as organized athletics, is to be pursued during this time, the ankle should be taped by someone experienced in this technique.

KNEE INJURIES

The ligaments of the knee may be stretched - strained, partially torn - sprained, or completely torn - torn ligaments. Unlike ankle ligament injuries, torn ligaments in the knee need to be repaired surgically as soon as possible after the injury occurs. If surgery is delayed, the operation is more difficult and less likely to be successful. For this reason, the approach to knee injuries is more cautious than for ankle injuries. If there is any possibility of a torn ligament, go to the doctor.

Fractures in the area of the knee are less common than around the ankle; they always need to be cared for by a doctor.

Knee injuries usually occur during sports when the knee is more likely to experience twisting and side contact - Deep knee bends stretch ligaments and may contribute to injuries; they should be avoided. Serious knee injuries occur when the leg is planted on the ground and a blow is received to the knee from the side. If the foot can't give way, the knee will. There is no way to totally avoid this possibility in athletics. The use of shorter spikes and cleats helps, but knee braces and supports give little protection.

ABNORMAL MOTION: When ligaments are completely torn, the lower leg can be wiggled from side to side when the leg is straight. Compare the injured knee to the opposite knee to get some idea of what amount of side to side motion is normal. If the knee slides front to back - called 'the drawer sign', this is even more serious, since it suggests a rear of the ligament in the front of the knee. If you think your knee motion may be abnormally loose, see a doctor.

If the cartilage within the knee has been torn, normal motion may be blocked, preventing it from being straightened. Although a torn cartilage

the scab soft. The simplest wound of the face requires three to five days for healing. The healing period for the chest and arms is five to nine days, for the legs it is seven to twelve days. Larger wounds, or those that have gaped open and must heal across a space require correspondingly longer periods to heal. If a wound fails to heal within the expected time, see a doctor.

There is a folk saying that red streaks running up the arm or leg from a wound indicate blood poisoning and that the patient will die when the streaks reach the heart. In fact, such streaks are only an inflammation of the lymph channels carrying away the debris from the wound. They will stop when they reach local lymph nodes in the armpit or groin and do not, by themselves, indicate blood poisoning.

INFECTED WOUNDS AND BLOOD POISONING

To a doctor, blood poisoning means bacterial infection in the bloodstream and is termed 'septicemia.' This is a serious condition. Fever is an indication of this rare complication of an infected wound. The patient usually feels terrible, not simply because of the pain from the wound.

An infected wound usually festers beneath the surface of the skin resulting in pain and swelling. Bacterial infection requires at least a day, and usually two to three days to develop. Therefore, a late increase in pain or swelling is a legitimate cause for concern. If the festering wound bursts open, pus will drain out. This is good, and the wound will usually heal well. Still, this demonstrates that an infection was present, and a doctor should evaluate the situation unless it is clearly minor.

NORMAL WOULD HEALING: An explanation of normal wound healing will be helpful:

1 - The body pours out serum into a wound area. Serum is yellowish and clear, and later turns into a scab. Serum is frequently mistaken for pus. Pus is thick, cheesy, smelly, and never seen in the first day or so.

2 - The edges of a wound will be pink or red, and the wound area may be warm. Such inflammation is normal.

3 - The lymphatic system helps remove dead cells from the wound. Thus, pain along lymph channels or in the lymph nodes can occur without infection.

CELL TREATMENT: Keep the wound clean. Leave it open to the air unless it is unsightly, oozes blood or serum, or gets dirty easily. If so, bandage it, but change the bandage daily. Soak and clean the wound gently with warm water for short periods, three or four times daily, to remove debris and keep

doesn't need immediate surgery, it deserves medical

PAIN AND SWELLING: the amount of pain and swelling doesn't indicate the severity of the injury. The ability to bear weight, to move the knee through the normal range of motion, and to keep the knee stable when wiggled is more important.

Typically, strains and sprains hurt immediately and continue to hurt for hours and even days after the injury. Swelling tends to come on rather slowly over a period of hours but may reach rather large proportions. When a ligament is completely torn, there is intense pain immediately, which subsides until the knee may hurt little or not at all for a while. Usually there is significant bleeding into the tissues around the joint when a ligament is torn, swelling tends to come on quickly and be obvious, even impressive, to the eye.

The best policy when there is a potential injury to the ligament is to avoid any major activity until it is clear that this is a minor strain or sprain. Cell treatment is intended only for minor strains and sprains.

CELL TREATMENT: RIP is the key word: Rest, Ice, and Protection. Rest the knee and elevate it. Apply an ice pack, enclosed in a plastic bag or towel, for at least 30 minutes to minimize swelling, if there is more than slight swelling or pain despite the fact that the knee was immediately rested and ice was applied, see the doctor. If this isn't the case, apply the ice treatment on the knee for 30 minutes on and 15 minutes off for the next several hours. Limited weight bearing may be attempted during this time with a close watch for increased swelling and pain.

Heat can be applied after 24 hours. By then, the knee should look and feel relatively normal; after 72 hours this should clearly be the case. Remember,

ARM INJURIES

The ligaments of the wrist, shoulder, and elbow joints may be stretched - strained, or partially torn - sprained, but complete tears are rare. Fractures may occur at the wrist, are less frequent around the elbow, and are uncommon around the shoulder. Injuries often occur during a fall, when the weight of the body is caught on the outstretched arm.

WRISTS: The wrist is the most frequently injured joint in the arm. Strains and sprains are common, and the small bones in the wrist may be fractured. Fractures of these small bones may be difficult to see on an X-ray. The most frequent fracture of the wrist involves the ends of the long bones of the forearm and is easily recognized because it causes an unnatural bend near the wrist. Physicians refer to this as the 'silver fork deformity.'

ELBOWS: 'Tennis elbow' is the most frequent elbow injury. Other injuries are much less frequent and usually result from falls, auto accidents, or contact sports. A common problem in children under

SHOULDERS: The collarbone - clavicle, is a frequently fractured bone; fortunately, it has remarkable healing powers. An inability to raise the arm on the affected side is common; the shoulders may also appear uneven. Bandaging the arm to the chest is the only treatment required.

Shoulder separation, often seen in athletes, is perhaps the most common injury of the shoulder. It is a stretching or tearing of the ligament that attaches the collarbone to one of the bones that forms the shoulder joint. It causes a slight deformity and extreme tenderness at the end of the collarbone. Sprains and strains of other ligaments occur, but complete tearing is unusual, as are

a doctor because of these problems and because skin grafts are often needed.

CELL TREATMENT: Apply cold water or ice immediately. This reduces the amount of skin damage caused by the burn and also eases pain. The cold should be applied for at least five minutes and continued until pain is relieved or for one hour, whichever comes first. Be careful not to apply cold so long that the burned area turns numb - that could cause frostbite! Reapply treatment if pain returns.

You may use acetaminophen, aspirin, ibuprofen, or naproxen to reduce pain.

Blisters shouldn't be broken. If they burst by themselves, as they often do, the overlying skin should be allowed to remain as a wet dressing. Let the skin underneath toughen up, keep the area clean, and protect yourself against the cause of the blisters next time.

Local anesthetic creams or sprays may relieve pain, but some doctors believe they slow healing. Also some patients develop an irritation or allergy to these drugs. Don't use butter, cream, or ointments - such as vaseline. They may slow healing and increase the possibility of infection. Antibiotic creams - Neosporin, Bacitracin, etc. - probably neither help nor hurt minor burns.

Any burn that stays painful for more than 48 hours should be seen by a doctor.

BURNS

How can you tell how bad a burn is? Burns are classified according to depth.

FIRST DEGREE BURNS: First degree burns are superficial and cause the skin to turn red. A sunburn is usually a first degree burn.

First degree burns may cause a lot of pain but aren't a major medical problem. Even when they are extensive, they seldom result in lasting problems and seldom need a doctor's attention.

SECOND DEGREE BURNS: Second degree burns are deeper and result in splitting of the skin layers or blistering. Scalding with hot water and a very severe sunburn with blisters are common instances of second degree burns.

Second degree burns are also painful and, if extensive, may cause significant fluid loss. Scarring, however, is usually minimal, and infection usually isn't a problem.

Second degree burns can be treated in the cell if not extensive. Any second degree burn that involves an area larger than the patient's hand should be seen by a doctor. In addition, a second degree burn that involves the face or hands should be seen by a doctor. It might result in cosmetic problems or loss of function.

THIRD DEGREE BURNS: Third degree burns destroy all layers of the skin and extend into the deeper tissues. Such areas are painless because nerve endings have been destroyed. Painless third degree burns may be surrounded by painful second degree burns, however. Charring of the burned tissue is usually obvious.

Third degree burns result in scarring and present problems with infection and fluid loss. The more extensive the burn, the more difficult these problems. All third degree burns should be seen by

fractures. Dislocations of the shoulder are rare outside of athletics but are best treated early when they do occur.

In summary, severe fractures and dislocations are best treated early. These usually cause deformity and severe pain and limit movement. Other fractures won't be harmed by delayed treatment if the injured limb is rested and protected. Complete tears of ligaments are rare; strains and sprains will heal with cell treatment.

CELL TREATMENT: RIP is the key word: Rest, Ice, and Protection. Rest the arm and apply ice wrapped in a towel for at least 30 minutes. If the pain is gone and there is no swelling at the end of this time, you can stop the ice treatment. A sling for shoulder and elbow injuries and a partial splint for wrist injuries will give protection and rest to the injury while allowing the patient to move around. Continue ice treatment for 30 minutes on and 15 minutes off through the first eight hours if swelling appears.

Heat can be applied after 24 hours. The injured joint should be usable with little pain within 24 hours and should be almost normal by 72 hours. If not, see the doctor. Complete healing takes from four to six weeks, and activities with a likelihood of reinjury should be avoided during this time.

HEAD INJURIES

Head injuries are potentially serious, but few lead to problems. A concussion or a head injury that has led to a loss of consciousness requires emergency care.

If the skull isn't obviously damaged, bleeding inside the skull is the major concern. the accumulation of blood inside the skull may eventually put pressure on the brain and cause damage. Fortunately, the valuable contents of the skull are carefully cushioned. Careful observation is the most valuable tool for diagnosing serious head injury. Usually this can be done as well in the cell as in a hospital; there is some risk either way, so it is your choice.

CELL TREATMENT: Ice applied to a bruised area may minimize swelling, but 'goose eggs' often develop anyway. The size of the bump doesn't indicate the severity of the injury.

The initial observation period is crucial. Symptoms of bleeding inside the head usually occur within the first 24 to 72 hours. Check the patient every 2 hours during the4 first 24 hours, every 4 hours during the second 24, and every 8 hours during the third. Look for the following symptoms:

- Loss of alertness: Increasing lethargy, unresponsiveness, and abnormally deep sleep can precede coma;
- Unequal pupil size after injury: About 25% of people have pupils that are slightly unequal all the time.
- Severe vomiting: The vomit may be ejected several feet.

In rare cases, slow bleeding inside the head may form a blood clot that produces chronic headache, persistent vomiting, or personality changes months after the injury. This is called a subdural hemotoma.

MINOR INJURY: A typical minor head injury generally occurs when someone falls and bangs his or her head. The person remains conscious, although initially stunned. For a few minutes, the person is inconsolable and may even vomit once or twice during the first couple of hours. The person may sleep for a short while but is easily aroused. Neither pupil is enlarged, and the vomiting ceases after a short time. Within eight hours, the person is back to normal except for the tender 'goose egg.'

SEVERE INJURY: In a more severe head injury, symptoms usually take longer to develop. Two or more of the danger signs are often p½resent at the same time. The individual remains lethargic and isn't easily aroused. A pupil may enlarge and
The vomiting is usually forceful, repeated, and progressively worse. If in doubt, see the doctor.