To Your Health

Surgery Can Help Cystitis

By DR. JOSEPH G. MOLNER

Dear Doctor Molner: Can trauma in childbirth cause bladder infections which continue to plague the mother?

I doubt if there is any pain more disconcerting than the burning urgency and pressure associated with chronic cystitis.

How accurate are intravenous X-rays? Will X-rays alone tell the "whole picture?"—A. C.

Trauma or injury in childbirth isn't likely to cause bladder infection directly.

Rather what happens is that supporting tissues are torn or stretched, letting the bladder wall sag into the vaginal tract.

This is called cystocele, which I have mentioned rather often.

It can result in incomplete emptying of the bladder and permit irritation (bacterial and chemical) of the lining of the bladder. This is cystitis. The consequences can include frequent or painful urination, inability to control urination (called "stress incontinence"), and a sense of general discomfort in the area.

Very often the whole trouble can be eased or ended by a "vaginal plastic operation" to correct the torn or stretched tissues. (I don't mean that it requires a "plastic surgeon" in the common sense of the word. Gynecologists, urologists, general surgeons all do this type of surgery.)

As to your other question: Intravenous kidney X-ray (known as an I.V. — or intravenous — pyelogram) gives considerable information about location, size and function of the kidneys.

It does not, however, give as much data as a "retrograde pyelogram," which also involves X-rays. In this, the inside of the bladder is first inspected directly with an instrument called a cystoscope.

Next, tiny catheters or tubes are inserted into each ureter, one of which leads to each kidney. Thus it is possible to test for infection or bleeding from each kidney separately. X-rays also are taken.

This whole procedure is much more elaborate and painstaking and usually requires one or two days in the hospital, whereas the I.V. pyelogram does not. More time, more effort, more information.

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Dear Sir: Is there any harm in using one-a-day vitamins? I have stomach ulcers and am on a bland diet. — N.S.

No. In fact an "ulcer diet" may be low in Vitamins B and C, so a combined vitamin supplement is in order.

Ask Andy

Heavy Water: What Is It?

Andy sends a complete, 20-volume set of the WORLD BOOK ENCYCLOPEDIA to Jimmy Wehking, age 11, of Houston, Texas for his question:

What is heavy water?

Water, like everything else in the world, is made from atoms of the basic chemical elements. The smallest particle of water is a unit called a covalent bond, which is a special kind of molecule. This unit is a bundle of three atoms linked together by the sharing of their electrons. It contains one atom of oxygen and two atoms of hydrogen and these individual particles of water tend to link themselves together in pairs.

Maybe you have heard water called H-2-O. This is chemistry shorthand which tells us that a basic particle of water contains two atoms of hydrogen and one atom of oxygen. But in all the water in the world, there is about one particle in every 5,000 particles which is slightly different from its neighbors. It is a particle of heavy water.

This particle of heavy water is different because of a special kind of hydrogen atom called an isotope. The ordinary hydrogen atom contains one proton particle in its nucleus and one orbiting electron. An atom of the isotope heavy hydrogen, which is called deuterium, contains a neutron particle in its nucleus in addition to its one proton.

The isotope deuterium is about twice as heavy as ordinary hydrogen. This atom adds extra weight when it occurs in a particle of water. In nature, such particles of heavy water are rare. The job of preparing a quantity of heavy water in which the isotope deuterium is used in place of ordinary hydrogen must be done in a laboratory.

Heavy water looks and feels like ordinary water, but it has different chemical properties. Ordinary water boils at 100 centigrade degrees, heavy water boils at 101.42 egrees. Ordinary water freezes at 0 centigrade degrees, heavy water freezes at 3.82 degrees. Heavy water, then, has a slightly higher boiling point and a still higher freezing point than ordinary water.

Andy awards each day a full set of the World Book Encyclopedia for the first question he selects to answer. When a second question is answered a large world globe or atlas is awarded. Questions are accepted from teen-age or less-than-teen-age readers. They should be addressed to the Register-Guard, 975 High St., Eugene. Andy prefers that questions be written on postcards, rather than in letter form.

Seeds refuse to germinate in heavy water, tadpole and certain other animals cannot live in it. But heavy water is a very useful liquid in the fields of atomic energy. It can be used to discipline the furious energy of an atomic pile. It can be used to take the heat from an atomic pile and put it to use. Some of the reactors which generate atomic energy use heavy water as a moderating agent to control the atomic energy which is released by chain reaction. Some reactors use heavy water as a cooling agent to reduce the seething temperature of the atomic pile and syphon off this heat, using it to make electrical power.

This man-made heavy water, so useful in the field of atomic energy, is called deuterium ovide. So far, our chemists have not found a cheap way to produce it and deuterium oxide is a very expensive fluid. If we find an easy way to separate that one particle of heavy water from some 5,000 particles of ordinary water, the cost of producing atomic power will be much less.

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Andy sends a HAMMOND'S NATURE ATLAS OF AMERICA to Roy Wayne Chrisman, age 11, of Goodlettsville, Tenn., for his question:

How can you tell the moccasin snake from the cottonmouth?

The copperhead, alias the cottonmouth, alias the water moccasin is one and the same breed of snake—a deadly poisonous pit viper somewhat like the deadly poisonous rattlers. There are a couple of cousins in this breed of snake with slight variations. The breed is native to the eastern states with a westward range reaching through the prairies of Texas.

The copperhead, more than a yard long, lives on high, dry ground. His head is copper color, his body blotched with copper-colored hour glasses. The water moccasin is a swamp snake, larger and darker than his cousin. Both members of this deadly breed have mouths lined with skin as white as cotton.

Haiku: Traditional Japanese Poems With Just 17 Syllables

"The wingless cricket on the poet's pen. Unheard poems are sweetest." That is a haiku about haiku.

Haiku are traditional Japanese poems that compress a wealth of observation, emotion and philosophy into just 17 syllables. Limited to three lines of five, seven, and five syllables, a haiku has no rhyme or meter. Translations, however, often employ both.

These deceptively simple fragments are enormously popular in Japan, the National Geographic Society says. About 50 monthly magazines are devoted to haiku, and at least a million of the poems are published annually.

Poems and Milk

Thousands of unpublished haiku are written for pleasure of poets and their friends. Harold G. Henderson, an American authority on haiku, recalls that during a stay in Japan his milkman often brought him a new poem along with his daily milk.

The earliest haiku date from the 13th century, but the form did not flower until the time of Matsuo Basho, Japan's greatest haiku poet, who was born in 1644.

Scholars have discussed Basho's poems for 300 years. Literally translated, his most famous haiku reads: "Old pond: frog jump in, water-sound." It has been more graphically rendered: "The ancient pond! The frog plunged—splash!" Professor Henderson says that some critics consider this haiku too darkly mysterious to understand at all.

A famous story is told of Basho and a disciple walking through a field. The youth composed a haiku. "Red dragonflies! Take off their wings, and they are pepper pods!" Basho said it was not a true haiku, and pods! Add wings to them, and they are dragonflies."

Some of Basho's best-known haiku are:

"On a withered branch a crow has settled—autumn nightfall."

"Poverty's child—he starts to grind the rice, and gazes at the moon."

"So soon to die, and no sign of it is showing — locust cry."

"Snow that we two looked at together—this year has it fallen anew?"

The elusive essence of haiku is evocation, allusion and suggestion. It is impossible to put all the connotations of the best haiku into words.

Sometimes, however, the meaning is quite clear, as in "Striking the fly, I hit also a flowering plant." A haiku written by a poet-journalist reads. "Alone in the editorial department; summer rain falling."

Use Season Words

Haiku poets draw upon thousands of traditional themes, most of them dealing with nature. Each haiku contains one "season word" that relates the poem to a specific time. Butterfly is a spring word; dragonfly evokes summer.

A vivid spring haiku reads: "Up the barley rows, stitching, stitching them together, a butterfly goes." Another famous butterfly haiku is "On the temple bell has settled, and is fast asleep, a butterfly." Haiku connoisseurs were incensed by a translation that read, "The butterfly sleeps well perched upon the temple bell . . . until it rings." The last three words destroyed the poem, they said.