

medical sciences

Gathered at the clinical meeting of the American Medical Association in Denver last week

PSYCHOSOMATIC MEDICINE

Conflicts may cause symptoms

The medical profession is still reluctant to accept sex conflict as a cause of the wide range of symptoms with which sex might be associated.

Dr. Daniels D. Hansen, an internist in Inglewood, Calif., reports that of the patients he sees in practice, one of three shows symptoms due to sexual conflicts. Therefore, when treating difficult or refractory medical problems, sexual problems should always be considered.

The symptoms resulting from sexual conflicts can include anything from chronic fatigue, skin rashes, fever, respiratory congestion and vomiting, to a seductive attitude to the physician, he says. Conflicts might include inadequate sex life and guilt from an extramarital affair.

SWEATING

Salt and water intake

Traditionally, athletes performing in hot weather are advised to drink fluids and take salt when sweating excessively, to guard against heat exhaustion, or stroke.

But the present practice of taking salt and water is haphazard, says Dr. Richard L. Westerman of Dow Chemical Co. in Zionsville, Ind. Instead, salt replacement should be tailored to the individual, based on the amount of weight lost in a workout or game.

Insufficient water replacement can cause too little sodium in the blood, while overdrinking can cause the reverse. Athletes should weigh in before and after activity. Liquid should be replaced after activity causing losses of between two and five pounds. However, with losses over five pounds, partial replacement should be made during activity. The number of pints lost can be calculated mathematically from the pounds lost.

In addition to replacing liquid, two to four 500-milligram tablets of salt should be replaced for each pound lost, Dr. Westerman says.

CIRCULATION

Automatic blood pump

In certain cases of heart shock and open heart surgery the circulation of the blood needs support. Blood pumps that mimic heart action are used but have the major disadvantage of requiring continuous monitoring.

A new blood pump that is entirely automatic and thus does not require monitoring has been developed at Wadsworth Veterans Administration Hospital in Los Angeles, reports Dr. Edward Passaro Jr., of the University of California at Los Angeles School of Medicine.

Driven by compressed gas, the pump fills passively and the floating valves are closed by the incoming blood. The valves cannot be closed by air, so air masses are not produced. If either inflow or outflow lines are blocked, the pump will automatically stop, and when the block is removed the pump will resume action.

Dr. Passaro says the pump is especially suited for maintaining circulation of blood in organs. Because the

pump is portable and automatic, it should be a great aid in obtaining, maintaining and transporting organs for transplantation, he says.

TRAUMATOLOGY

Absorbable sutures

The ideal suture material should cause minimal tissue reaction, be ultimately absorbable and possess excellent tensile strength and consistent knot security for a variety of surgical procedures. Catgut, most frequently used, produces marked inflammation, and other sutures, such as silk, nylon, filament wires and synthetics, though they produce very little reaction, cannot be absorbed.

A new nonirritating, nontoxic, absorbable material, polyglucolic acid, may be the answer, says Dr. Raymond E. Silk, medical director and chairman of the Department of Surgery at Broad Street Hospital and Medical Center in Philadelphia, Pa. Out of 150 cases that had been sutured with the material, 84 percent were healed and 16 percent partially healed six to eight weeks after surgery, he reports.

Studies in rats, rabbits and dogs show that PGA suture is an absorbable material that produces only minimal inflammation, is extremely flexible, having handling properties like silk sutures, and resists fraying. The knot-pull strength and knot security, Dr. Silk reports, are equal or superior to those of catgut.

Because the suture has excellent tensile strength, particularly during the critical first 7 to 10 days, and causes only limited tissue reaction, it shows potential for most general surgical procedures, the physician says.

ANGINA PECTORIS

Drugs preferred to surgery

Angina pectoris, severe heart pain caused by an insufficient supply of blood to the heart muscle, is being increasingly treated by surgical procedures that resupply the heart with blood vessels.

However, Dr. Henry I. Russek of St. Barnabas Hospital in New York City asserts that surgery is not the answer to severe angina pectoris. He says combination therapy with the drugs propranolol and isosorbide dinitrate produce much lower mortality, more benefit and fewer complications than surgery. The isosorbide dinitrate dilates the blood vessels, bringing more blood to the heart, but increases the heart beat, putting an extra load on it. Propranolol decreases the heart beat. The combination increases the flow of blood to the heart without the ill effect of increased heart beat.

A review of studies shows that of 506 patients treated surgically in four clinics, 100 died less than one year following surgery. Of 60 receiving the drug combination for more than a year, only three patients died. Dr. Russek notes that 88.3 percent of the drug-treated patients had less painful symptoms, could exert themselves harder and had improved heart beats. Similar changes were seen in only 20 percent of the surgical survivors.