medical sciences notes

INSTRUMENTATION

Oxygen tent for \$50

An oxygen tent has been introduced in London at a cost of \$50, a price that brings it within the means of even the smallest hospital. The tent has been backed by two licensed producers—the Medical and Industrial

Equipment Ltd., and Plastics by Denbar Ltd.
It will be marketed as HI-CON-TENT and is expected to be of special interest in developing countries. The conventional oxygen tent needs a refrigeration unit to keep down the temperature inside, but in the new one, the patient's temperature can be regulated without refrigeration. Other tents now in use cost 12 times as much.

A gas inlet at the top of the tent ensures the passage of oxygen before the patient's face before reaching the outlet through the fringe at mattress level. The temperature is kept at about 75 degrees to 80 degrees F. The tent was designed at University College Hospital, London, by Dr. D. J. Wayne and Anne Chamney.

PEDIATRICS

Teething infants

Teething rings may help a baby's distress during his tooth-cutting period, but drugs are in disrepute, Dr. Joseph A. Little of Nashville, Tenn., says.

Dr. Little reports in the Feb. 12 issue of the JOURNAL

OF THE AMERICAN MEDICAL ASSOCIATION:

"The use of teething powders was quite common in the United States and especially in England and Australia at the turn of the century. There has been no indication, however, that the use of any local application to the gums of teething infants is beneficial."

Dr. Little concludes that although in rare instances a mild anesthetic on the gums may help, the mother must guard against overambitious care. Mild massage may be given if the gum tissue is not unduly sensitive.

MONGOLISM

Infrequent sexual relations blamed

Mongolism, long associated with advanced age in the mother (over 35), could be caused by the decreasing frequency of sexual relations among couples who have been married a long time.

The suggestion is made in the Feb. 10 NATURE, by Dr. James German of Cornell University Medical College, New York City.

He points out that this hypothesis "is attractive not only because it can be tested further but also because it implies that the incidence of the disorder could, in an informed society, be decreased.'

Dr. German argues that newly married older women may be less likely to have mongoloid babies than those who have been married for a number of years because

they have intercourse oftener.

The scientific reason for the theory is that since a man's sperm retains its potency for some 48 hours following its entry into the womb, any woman engaging in sexual relations at least once every two days would have a constant supply of sperm to fertilize her egg as soon as it leaves the ovary.

By contrast, sporadic or more widely spaced intercourse will expose her eggs to the risk of delayed fertilization, with consequent danger of chromosomal changes leading to a birth defect. Most mongoloids have 47 instead of the normal 46 chromosomes.

ASTHMA

Aerosol medicine can be dangerous

When an asthma patient is having a hard time breathing, the use of a nebulizer, or aerosol spray, with appropriately prescribed medication can afford relief. Excessive use, however, especially at times when asthma is not particularly bothersome, can be dangerous.

Dr. John F. Keighley, chief of the pulmonary section of the Veterans Administration Hospital in Syracuse, N.Y., told the 162nd annual convention of the Medical Society of the State of New York in New York City that addiction to the medicine has been reported, but that 'unhappily excessive use and addiction were taken no more seriously than a severe case of thumb-sucking.

Doctors are becoming increasingly concerned over the rising death rate for asthma, particularly in young people, Dr. Keighley says. Recently reports from Australia, England and the United States link sudden death in asthma to the excessive use of aerosol medicines.

Because the rising death rate due to asthma is occurring at a time when more effective treatment is available, it is pertinent to examine critically every approach. Commonly used drugs are epinephrine, or adrenalin, and isoproterenol, which is used to dilate blood vessels and passageways in the respiratory tract. Both have triggered attacks when used carelessly without actual need.

NERVE SUTURING

Second operation helps severed arm

The problem in surgical regeneration of a severed limb is getting nerves and circulation working after the surgeon replaces a limb.

One surgeon explains that the problem of suturing nerves is like repairing a telephone cable by putting the ends together, at the same time excluding wires from the central exchange, hoping that each little wire will connect with the correct house.

In some cases on record, the nerves will not function and the limb has to be amputated.

Partial success in an operation of this kind is reported in the case of Mrs. Georgia Ann White, who has proudly written her name using the arm that was severed in a traffic accident 13 months ago.

Dr. J. Paul Harvey of the University of Southern California performed a second operation to suture nerves left unconnected in the first operation. After physical therapy at the Los Angeles County General Hospital, Mrs. White, who is 43 years old, can partially clasp and unclasp her hand, and with the aid of devices invented by an occupational therapist, she can do simple chores.

Although her arm is not sufficiently functional to permit Mrs. White to resume her job in the food service division at the Veterans Administration Hospital at Sawtelle, Calif., Dr. Harvey says her own arm is probably equal in function to an artificial arm and looks sound.

2 march 1968/vol. 93/science news/209