

## SURGERY

# Nasal Surgery Improved

► MODERN NASAL SURGERY is as successful in restoring normal breathing as it is in providing a better cosmetic appearance.

New knowledge about the healing rates of different parts of the nose, and better and more accurate instruments to measure intranasal pressures make possible the bonus of better health.

Even though no deformity is apparent, abnormal breathing is very common.

Dr. Kenneth Hinderer, Pittsburgh, Pa., rhinologist and spokesman for the Pennsylvania Academy of Ophthalmology and Otolaryngology, reported that abnormal respiration caused by a common internal nasal deformity, such as a deviated septum, may produce such unexplained symptoms as nose bleeds, facial pains, headaches and recurrent sore throats and coughs when a person does not have a cold.

Dr. Hinderer said that "In the normal act of breathing, the usual respiratory rate is 15 times a minute. Multiply this by the number of minutes in a year and you will find that you breathe eight million times a year. But when an abnormal condition occurs, creating a septum-pyramid deformity, breathing is affected.

"Abnormal respiration over a period of years increases the normal effort of breathing eight million times a year to a point where just breathing abnormally is as great an effort as strenuous activity for the normal person."

The cause of discomfort, Dr. Hinderer stated, is a change in air currents produced by the poor relationship of the septum to the nasal pyramid. When the septum

is deviated, a rapid air current flows through the narrow nostril, partially closed by the bent septum. At the same time the air flows in turbulence and eddies through the open nostril.

These altered air currents cause abnormal intranasal pressures that result in irritation of the fifth, seventh, ninth and tenth cranial nerves and in time produce areas of atrophy, hypertrophy and tension in each nostril. The resulting localized areas of dryness and crusting may result in many general symptoms that are never thought to be associated with the altered intranasal air pressures and the injury to the mucous membranes created by the atrophy.

By using manometers, rhinomanometers and rhinopneumanometers, rhinologists can determine the normal function of the nose. From these norms, they can then chart the actual work load of breathing in the normal and abnormal nose and thus arrive at some definite determination of the possible benefit of an operation to the patient.

A rhinoplastic operation is an extremely delicate job. Unless it is custom-tailored to each patient's condition and requirements, it may prove to be unsuccessful. Years ago, the only object in nasal reconstruction was better appearance. Today, rhinologists know that success demands an improvement in breathing.

Nasal surgery is difficult and should not be practiced without special training and intensive and careful study of the patient and his nose. In well-skilled hands, normal breathing can be achieved as well as a cosmetic result. The operation can be performed successfully at all ages.

• Science News Letter, 88:98 August 14, 1965

## MEDICINE

# Drug Risky in Pregnancy

► THE POWERFUL ANTIBIOTIC streptomycin when given to pregnant women can damage the ear if not the actual hearing of their babies.

Eight children from 6 to 13 years old were found to have minor abnormalities of eighth-nerve function in the inner ear, or labyrinth, as a result of their mothers' treatment with streptomycin before giving birth.

All the mothers had been treated at the University College Hospital, London.

The researchers reported the cases in the British Medical Journal, July 31, 1965, warning that all children whose mothers had been treated with the antibiotic before their birth should be examined for eighth-nerve damage before they themselves are given streptomycin.

The mothers were among 336 women who had been treated for tuberculosis during pregnancy with a combination of drugs. Streptomycin was given along with isoniazid and para-aminosalicylic acid. The investigators said that no particular period

of pregnancy was found to be more dangerous than another, but they warned against continuous administration of streptomycin daily. They found normal ear conditions in the children of four mothers who had taken the antibiotic intermittently.

"Clearly, there are risks associated with the use of streptomycin in pregnancy," Drs. N. Conway and B. D. Birt said. "Examination of large numbers of children is needed to put the risks in perspective."

Previous studies have shown that streptomycin crosses the placental barrier between mother and baby.

Several reports of deaf children born to mothers treated with the antibiotic have appeared, but the present study showed only minor effects.

It is known that side effects of streptomycin can include ear damage to the person taking it, but further work is needed to evaluate the damage to the unborn baby, the researchers said.

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## MEDICINE

# Hospitals Linked by TV For Medical Instruction

► SOME 100 SOUTHERN California hospitals will be linked this fall by educational television for postgraduate medical instruction.

The series, sponsored by University of California Extension in Los Angeles, covering all aspects of medicine, will be telecast once a week from Station KCET, the educational television station in Los Angeles, to an area extending from Santa Barbara to San Diego.

The programs will be encoded or "scrambled" to insure privacy of medical communications and will be received at each hospital by sets equipped with special decoders.

The first two ten-week series for the coming year will be "What's New in Cancer?" co-sponsored by the American Cancer Society, and "Management of the Nervous Patient," co-sponsored by the National Institute of Mental Health. Another, "What's New in Heart Disease?" is being prepared.

Telephone communication between hospital and station will allow participating doctors to question speakers.

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## PUBLIC HEALTH

# AMA Proposes Methods For Safe Boxing Matches

► NEW SAFETY procedures for boxing have been proposed by a committee of the American Medical Association.

They are:

1. Research to produce a more effective headguard.
2. Experimentation with less padding in gloves, so that the threat of hand damage will "inhibit the power of blows." (Actually, of course, padded gloves were invented to protect fighters. In the old days it was bare knuckles.)
3. Prohibition of wrapping the hands, again with the objective of cutting down the force of the blows. (Wrapping was instituted to keep fighters from breaking their hands.)
4. Revision of scoring systems to place greater emphasis on "skillful offensive and defensive maneuvering and less on the knockout blow."

The AMA Committee on the Medical Aspect of Sports also recommended as "prerequisites" for every bout: a thorough medical examination, presence of a doctor with authority to stop the fight, an end to any fight after more than one knockdown in a round, or when a fighter cannot control the position of his head.

Also automatic suspension of any knocked-out fighter for as long as medical consultants feel necessary, new shock absorbing ring padding, required use of headgear, "quality" coaching and training, and referees familiar with health hazards of boxing.

The recommendations were outlined by Alfred Balk in Today's Health, August, 1965.

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