PHYSIOLOGY

# New-Found Sex Hormone Relieves Migraine Headaches

## Reduction of Swelling in Pituitary Gland May be Cause of Relief to Suffering Woman Patients

CERTAIN type of migraine headaches apparently can be relieved by injections of one of the recently-discovered female sex hormones. Success with this treatment in a number of cases and explanation of the probable cause of the ailment were reported to *The Lancet*, English medical journal, by Dr. A. P. Thomson, physician to the General and the Children's Hospital in Birmingham, England.

Migraine is a malady characterized by recurring attacks of intense headaches, accompanied generally by nausea and vomiting and sometimes by visual disturbances. Dr. Thomson suggests that within the term are probably included many headaches of different origin.

The type which he investigated occurred, with one exception, in women and in most cases occurred regularly once a month. The headaches were so severe that the patients were obliged to stay in bed for about two days, and in some cases morphine was required to give some relief. The patients were all normal in every other respect and careful examinations had not shown any cause for the headaches.

#### Follicular Hormone Helped

The time when the attacks occurred, and certain of the accompanying symptoms, suggested to Dr. Thomson that they might be related to some disturbance or abnormality of the pituitary gland, which has a profound influence on the functioning of the sex glands. Following this lead with one patient, after other remedies had failed, Dr. Thomson tried injections of ovarian follicular hormone. The headache was completely relieved and the other symptoms also cleared up. Similar results were obtained with other patients who apparently suffered from the same type of migraine.

X-ray pictures of the heads of these patients showed changes in the bony hollow in which the pituitary gland lies. Thomson explained the headaches by the theory that ordinarily this hollow is open enough at the top to allow some

expansion of the pituitary. Such expansion or swelling may occur regularly in women during certain periods of glandular activity. If the hollow is "roofed over," as Dr. Thomson found it in his patients, the expansion of the gland may create enough pressure on certain nerves and blood vessels to cause the headaches.

Extensive search failed to show this condition of the bony hollow in persons who did not complain of headaches. In two cases there was direct inheritance from mother to daughter of the bone condition and of the headache attacks. These facts Dr. Thomson presented in support of his theory. He also pointed out that the hormone which caused improvement in the headaches has been shown to reduce the size of the pituitary gland in animals.

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ARCHAEOLOGY

### Site of Stone Age "Factory" Discovered

EN of the Old Stone Age had their Pittsburghs and Detroits—places where they gathered to make tools because of unusual abundance of workable stone or other favorable circumcumstances. Discovery of such a stone age "factory" in southern France has been announced by the Smithsonian Institution.

The site was found by J. Townsend Russell, collaborating archaeologist of the Smithsonian staff. Tramping through a forest in the foothills of the French Pyrenees, he noticed man-worked flakes of flint along a rain-washed cart track. Subsequent exploratory digging, or "soundings," revealed a very extensive surface quarry under two or three feet of surface soil that has piled up through the ages since the old-time hunters squatted there to chip weapons.

The workmanship of the pieces found indicate that the tool-makers in this ancient workshop belonged to the cultural division of the Crô-Magnon race known

as the Solutréan, from the name of the place where tools of this type were first discovered. The Solutréan workmen flaked beautifully even laurel-leaf-shaped tools out of flint, but had not yet learned how to grind and polish their blades. Only toward the end of the era did these artisans in stone achieve this new skill.

The flint at the site discovered by Mr. Russell is not of the best quality, indicating that possibly even in the Old Stone Age there already existed distinctions between "quality" and "cheap" goods.

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ASTRONOMY

### Faye's Comet Returns On Septennial Visit to Sun

AYE'S COMET, a periodic visitor to the earth's corner of the heavens, has returned after an absence of seven years. It was spied just after sunset on Aug. 30 by Prof. Arnold Schwassmann of the Bergedorf Observatory near Hamburg, Germany, and word of its re-discovery was relayed to the Harvard College Observatory, as American clearing house for astronomical news.

As seen by Prof. Schwassmann, the comet was very faint, being of twelfth magnitude, and not nearly bright enough to be visible to the naked eye. It also lacked a tail. Its position, in the celestial equivalents of longitude and latitude, was right ascension twenty-seven minutes one and eight-tenths seconds, declination fourteen degrees fifty-three minutes thirty-two seconds. This point is now in the western sky, not far from the constellation Andromeda.

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GENETIC

### Magenta Cabbage Bred At Cornell University

AGENTA cabbages may soon help to make the marketplace gay. A variety of cabbage displaying this brilliant color, much nearer a true red than the so-called red cabbages now grown, has been produced by breeding experiments at Cornell University. The common "red" cabbages are really purple.

The new genetic combination, which offers as color possibilities four alternatives, purple, sun color, magenta and green, was produced by Roy Magruder of the U. S. Department of Agriculture and Prof. C. H. Myers of Cornell.

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