

gegee is, was 7 gm. en die grootste totale dosis aan enige pasiënt was 16.3 gm.

Hirsoetisme en stemveranderinge was veelvuldig, en alkaliese fosfatase waardes het by 'n aansienlike persentasie gevalle gedaal tot normaal, hoewel die waardes in sommige gevalle in werklikheid gedurende en na behandeling gestyg het. Die komplikasie van hiperkalsamie was behandel deur binnearse inspuitings van 'n 2.5% oplossing van natrium sitraat en staking van testosteroon-behandeling. Die skrywers som hulle bevindings as volg op:

Subjektiewe verbetering het op steroïde behandeling by meer as die helfte pasiënte met gevorderde borskanker voorgekom, maar objektiewe verbetering was slegs by ongeveer kwart van die 50 pasiënte te bespeur.

Die verligting van simptome het hierdie behandeling, by daardie pasiënte wat gunstig gereageer het op die hormoon, van definitiewe terapeutiese waarde gemaak. Sterilisasie van jong vrouens met borskanker word nadruklik as die huidige program ondersteun.

Hoewel die pasiënte wat behandel is met steroïde nie lank genoeg opgevolg is om die uitwerking op die langdurig te bepaal nie, glo die skrywers dat die lewensduur verleng is by daardie pasiënte wat gunstig op die steroïd gereageer het.

Sorgvuldig beheerde ondersoek behoort met hierdie vorm van behandeling voortgesit te word. Die verligting wat dit aan die individuele geval kan gee, is so aansienlik dat hierdie bykomstige noodhulpmaatreël baie sorgvuldige oorweging vereis.

was 7 gm. and the largest total dose to any patient was 16.3 gm.

Hirsutism and voice changes were frequent, and alkaline phosphatase values dropped to normal in an appreciable percentage of the cases, although in some instances the values actually rose during and after treatment. The complication of hypercalcaemia was treated by intravenous injections of 2.5% sodium citrate solution and cessation of testosterone treatment. The authors summarize their findings as follows:

Subjective improvement occurred on steroid treatment in over half the patients with advanced breast cancer, but objective improvement was shown in only about a quarter of the 50 patients.

The relief of symptoms has made this treatment of definite therapeutic value in those patients who reacted favourably to the hormone. Sterilization in young women with breast cancer is emphatically supported as the current programme.

Although the patients treated with steroids have not been followed long enough to gauge the effect of the treatment on longevity, the authors believe that the length of life has been increased in those patients who reacted favourably to the steroid.

Carefully controlled investigations need to be continued with this form of treatment. The relief it can give to the individual case is so considerable that this ancillary palliative measure requires most careful consideration.

MIGRAINE AND FOOD ALLERGY

A SURVEY OF 20 CASES

HARRY HEYMANN, M.D. (BERLIN)

Johannesburg

This discussion relates to cases of true migraine based on the following criteria:

In the beginning of the migraine attack patients have unilateral or bilateral scotoma or hemianopsia, with bright spots, rings, bands, or flashes, rendering them incapable of focussing, and lasting for 20 to 30 minutes. The disturbances of vision disappear; and severe, usually unilateral headache sets in.

The headache increases in intensity, in most cases beginning over one eyebrow and extending over the scalp to the back of the head.

Additional symptoms and signs that may appear, include:

- (a) nausea with or without vomiting.
- (b) numbness with or without pain in the cheek, nose, lips, and tongue, usually on the affected side, but sometimes on the opposite side.
- (c) numbness with or without pain in the arm of the affected side, sometimes the opposite side, radiating to the hand. The patients complain of 'pins and needles' in their fingers, often accompanied by severe pain. Zonal hypo-

aesthesia is often present and the hand and the fingers are tender to the touch.

(d) difficult speech articulation with or without slight confusion.

The clinical pathology of migraine is well known and need not be discussed here.

The cases of migraine are surveyed for the purpose of drawing attention to the fact that the majority of migraine attacks seem to be allergic reactions to certain types of food, principally to chocolate (and cocoa), and pork (all the products of the pig such as ham, bacon, polony, etc.). This was obvious from the fact that 12 out of 20 cases were free or practically free from migraine attacks as soon as these two main agents had been strictly avoided. In 3 cases migraine attacks could be precipitated by small quantities of chocolate or pork. The attacks appeared within 6-12 hours after ingestion and lasted up to 3 days.

The actual constituents of the foods causing migraine attacks have not been determined, but are probably proteins. The possibility that these migraine attacks were of fat metabolic origin was ruled out by the fact that the

patients could eat all other fats, such as butter, ox-lard, mutton-fat, turkey-fat, chicken-fat, vegetable oils, etc., without reaction.

Other food substances may, of course, also be responsible; nevertheless these two agents in chocolate and pork were strikingly evident as etiological factors.

In some of the cases psychological influences, glandular disturbances and visual disturbances were either additional or even the only factors as the cause of migraine attacks. At times chocolate and pork did not provoke migraine attacks while at other times they did. It is possible that an additional trigger factor is required to set off their reactivity to those substances.

The history of migraine attacks in several members of the patient's family suggests an inherited disposition to the disease. Several of the cases suffered from attacks of urticaria in addition to migraine supporting the theory of allergic origin.

The following is an analysis of the 20 cases of migraine observed:

Twelve due to chocolate and pork alone.

Three due to chocolate and pork associated with psychological and other factors.

Two due to glandular disturbances.

One due to a visual refraction disturbance.

Two etiology not determined, but most probably of psychological origin.

With regard to sex and age distribution:

Seventeen were adult females.

Two adult males.

One male child (10 years).

ILLUSTRATIVE CASES

Six cases in which the eating of chocolate or pork was considered to be important are quoted.

Case 1. Mrs. H. L., aged 60. No family history of migraine attacks. No history of other allergies. The patient complained of migraine attacks during the last 6 years which increased in frequency during the last 2 years to 2-3 attacks per week, lasting from 15 to 72 hours.

She was put on a suitable diet free from pork and chocolate and had no attacks for 6 weeks.

On 2 occasions she was tempted to break her diet. Within 7 hours after eating a small piece of chocolate a severe migraine attack started and lasted for 48 hours. On the second occasion within 10 hours of eating a piece of liver polony a severe attack set in and lasted for 30 hours.

With the required diet strictly observed she had no more attacks for 6 months.

Case 2. Mrs. H. R., aged 45. No family history of migraine. No history of other allergies. Patient complained of migraine attacks for the last 4 years. She had severe attacks once or twice per week lasting from 24 to 48 hours.

She was put on a diet free from chocolate and pork resulting in freedom from attacks for 4 months.

During the meat shortage, having no meat in the house, she ate some pork chops. Within 12 hours she developed a severe migraine lasting for 48 hours. She then resolved never to eat those things again. When last seen she had been free from attacks for 3 months.

Case 3. Mrs. M. G., aged 48. No family history of migraine. No history of other allergies. Patient complained of migraine attacks for last 3 years increasing in frequency, lasting from 30 to 72 hours. It was found that she always got these attacks after ingestion of chocolate or pork. In spite of her employment in the hotel trade she observed the prescribed diet rigidly and was free from attacks for 4 months. After she

relaxed her diet her migraine attacks returned. Again the attacks could in every instance be traced to chocolate and pork, the reaction taking place within 6 to 10 hours.

On adhering to a strict diet no further attacks occurred for 3½ months.

Case 4. Boy, H. L., aged 10. No family history of migraine. No history of other allergies. Patient complained of attacks of severe headache and malaise for about 4 months. The mother was afraid the boy might be seriously ill, because he showed signs almost of paresis and behaved in a queer way. On investigation true migraine was diagnosed and it was found that the child always had his attacks after a pork meal. After strict avoidance of pork no more migraine attacks occurred and when last heard of the boy was free from attacks for about 2½ months.

Case 5. Mr. S. S., aged 19. No family history of migraine. No history of other allergies. Patient complained of severe attacks of migraine for the past 5 months, occurring twice per week and almost incapacitating him. He felt miserable and was very much afraid of the recurrence of these attacks. It was discovered that he had these attacks within 8 hours of ingestion of pork. After strict avoidance of all pork products he had no further attacks for 2 months and felt perfectly well, and since he knew the cause of his attacks also lost all fear.

Case 6. Mrs. S. S., aged 45. Family history of migraine; brother and son and her late mother affected. History of attacks of urticaria in Europe within ¼ hour after ingestion of fresh-water shell fish. Patient has suffered from migraine attacks since adolescence. The frequency of the attacks varies with her general state of health. The attacks usually occur once in every 2 months, sometimes once a month, but she may be free from attacks for a few months. Two months ago she developed the habit of eating half a slab of chocolate every afternoon. As a result she had a severe attack every other evening within 2 hours after ingestion. She was advised to stop eating any chocolate with the result that the number of attacks dropped to the usual level.

Most of the cases reviewed could ingest pork and chocolate for many years with impunity. It is a problem why these attacks first appear at different age levels. It may be that a disposition towards allergy is inborn, but that sensitization takes place suddenly due to a number of factors which, unfortunately, up to now, can only be guessed at.

SUMMARY

Twenty cases of migraine have been investigated. Of these: 15 were due to reactions to food, mainly pork and chocolate; 12 were due to food only; in 3 cases there were associated factors, such as psychological or glandular influences.

The possibility that these attacks were of fat metabolic origin was ruled out by the fact that all the patients could eat mutton-fat, ox-lard, butter, chicken-fat, turkey-fat, vegetable fats without reaction.

All these cases were free from attacks for a reasonable period after the 2 main agents, chocolate and pork, had been omitted from their diet.

In several cases migraine attacks could be precipitated by small quantities of the 2 agents within a few hours after ingestion, and when the diet was strictly observed again the attacks ceased.

Familial history of migraine attacks was found in a few cases. Other cases had a history of attacks of urticaria as well as migraine which may support a suggestion of the allergic origin of the condition.

I wish to express my gratitude to Dr. D. Ordman for his kind co-operation.