

**Read's Formula for B.M.R.\***

**Q.**—How reliable is Read's formula for calculating the basal metabolic rate? How does it compare with clinical findings for controlling thyroid therapy in myxoedema and in the diagnosis of thyroid disease?

**A.**—Read's formula for calculating the basal metabolic rate cannot be considered to be reliable, for it closely approximates to the actual figure in only slightly more than half of the cases. It does not compare favourably with clinical findings in determining the maintenance dose of thyroid in myxoedema; the improvement in the patient's mental and physical state is by far the best index for assessing the effectiveness of treatment. In the diagnosis of thyroid disease reliance should be placed on the clinical findings rather than on a formula.

**Hemiplegic Migraine**

**Q.**—What prognostic significance has an attack of hemiplegic migraine in a young man who for a number of years has been subject to attacks of ordinary migraine?

**A.**—Hemiplegic migraine usually means an attack which starts with hemiplegia and possibly sensory impairment on the same side, and if the hemiplegia is right-sided frequently dysphasia as well; headache of migrainous type starts soon after the onset of the hemiplegia. This type of migraine, which is rare, tends to occur in families, and it is usual for the hemiplegia to disappear completely in a period of a few hours up to three days. It is probable that the cause of the hemiplegia is vasoconstriction of cerebral arteries. In rare cases a permanent hemianopia may follow an attack of migraine with a hemianopic aura, and it is conceivable that permanent hemiplegia might follow an attack of hemiplegic migraine. An intracranial angioma can cause a similar clinical picture: if two or more attacks occur with the hemiplegia on the same side in each attack, radiography of the skull and carotid arteriography are advisable. The subject of migrainous variants, including hemiplegic migraine, was discussed recently in the Annual Oration to the Medical Society of London by Sir Charles Symonds.<sup>1</sup>

## REFERENCE

<sup>1</sup> *Trans. med. Soc. Lond.*, 1952, 67, 237.

**Apical Infection**

**Q.**—Can apical dental infection be confidently excluded by methods of examination other than radiography? If so, please state briefly what they are.

**A.**—Apical dental infection can be confidently excluded without the use of radiographs when the teeth concerned can be shown to be vital and the gum tissue is healthy with no pockets around the necks of the teeth.

Vitality tests are carried out by the application of heat, cold, or the electrical pulp-tester, for increasing periods of time until a response is felt. Heat is most conveniently applied by means of a heated piece of gutta-percha mounted on a dental instrument; cold by a pledget of cotton-wool saturated with ethyl chloride which is allowed to evaporate until a frost appears on the surface. A careful comparison with another tooth is necessary, because patients vary considerably in their sensitivity to these tests. Sometimes perfectly healthy pulps fail to give a response at all, and then a radiograph is necessary. An infected pulp can give a response so long as some vital tissue remains, but such a tooth will usually have caused pain.

The condition of the gum and underlying bone is important, because in paradontal disease infection may reach the apex of a tooth from a deep pocket between the tooth and the gum. If therefore the gum has lost its normal pale pink stippled appearance and bleeds readily when examined with a blunt probe to see whether a pocket exists, a radiograph is necessary to eliminate disease of the alveolar process.

\*Read's formula:  $0.75 (\text{pulse rate} + 0.74 \text{ pulse pressure}) - 72 =$  basal metabolic rate.

**Paget's Disease and Vitamin B<sub>12</sub>**

**Q.**—A patient of mine alleges that injections of vitamin B<sub>12</sub> have kept his Paget's disease (osteitis deformans) under control for at least three years. Is there any rational basis for this claim?

**A.**—There is no rational basis for this claim. Paget's disease may remain symptomless and quiescent for a long time without any treatment at all.

**Midge Repellents**

**Q.**—What measures of protection against attack by midges can be advised to a lady who has developed a skin sensitivity to dimethyl phthalate and wishes to spend much time out of doors?

**A.**—Control of midges is difficult because our knowledge of their breeding grounds is comparatively small: the indications are that they breed over large areas of moist or swampy ground. It is usual, therefore, to rely on repellents for protection. A person allergic to dimethyl phthalate might try other substances—for example, oil of citronella or pyrethrum extract. These can be made up into an ointment by admixture with petroleum jelly. Other synthetic repellents, such as "indalone," 2-ethyl,1-3 hexanediol, or the Swiss preparation "kik," may be difficult to obtain in this country.

Should the sufferer prove sensitive to any type of repellent applied directly to the skin she might try a wide-mesh veil, impregnated with undiluted dimethyl phthalate and worn attached to the brim of a hat. A suitable material would be green rot-proof netting with a mesh of 4/16 × 5/16 in. (6.35 × 7.94 mm.). If this is kept in a tin when not in use, one impregnation should last a fortnight. For protection of the legs, cotton stockings smeared with dimethyl phthalate might be effective and harmless.

**NOTES AND COMMENTS**

**Absence of Axillary Hair in a Man.**—Mr. H. MILNES WALKER (Crewe) writes: The advice to the young man embarrassed by the absence of axillary hair ("Any Questions?" June 27, p. 1460) is as good an example of fussy medication as one could wish to come across. It should not be beyond the wit of a sympathetic doctor to implant in his mind that most of us have some oddity or other that we should learn to ignore together with the occasional comment it may invite: surely better than the implantation into his body of a hormone that may produce in him effects as alarming as the absence of axillary hair. What young man would not rather be athletic though hairless under the arms than blessed with the hairiness of Esau and useless on the playing-fields?

**Correction.**—The paper on the genetics of infantile amaurotic idiocy referred to in "Any Questions?" last week (July 11, p. 107) was by D. Slome.

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