

METABOLIC INSUFFICIENCY

Measurement of the basal metabolic rate can lead one into all kinds of difficulties unless one is really *au fait* with its potentialities, its drawbacks and its interpretation. To start with, no semblance of accuracy can be expected unless the estimation is undertaken in strictly controlled conditions—with an experienced operator, upon a calm patient, in quiet surroundings. As regards interpretation, it is usually forgotten that the original careful investigators^{1,2} found that about 1-5% of normal euthyroid individuals had BMRs below -15%.

A recent vogue for the use of tri-iodothyronine in so-called 'metabolic insufficiency' characterized by a low BMR has spread through the United States. Vigorous advertising by certain drug manufacturers has, on top of the spate of scientific papers of very doubtful validity, fanned this unnatural flame. Kurland, Hamolsky and Freedburg^{3,4} started it, when they reported on 4 men with low metabolic rates, who complained of lethargy, easy fatigue, nervousness, emotional instability, irritability, sensitivity to cold, headaches, ill-defined aches and pains, and reduced sexual potency. These symptoms did not respond to treatment with desiccated thyroid, nor to l-thyroxin in usual dosage. The patients were believed to have normal thyroid function, because the uptake of radio-active iodine, the serum protein-bound iodine, and the serum cholesterol were all normal. 3:5,3'l-tri-iodothyronine administered alone in moderate doses, or combined with l-thyroxin, in small doses, produced a rapid elevation in BMR and relief of symptoms.

Tittle⁵ reported similar cases with basal metabolic rates between -28 and -36%. Six of these responded better to tri-iodothyronine than to l-thyroxin, but 2 did better with l-thyroxin. Fields⁶ reported on 40 children with 'metabolic insufficiency', but his criteria for diagnosis will not withstand careful scrutiny. Morton⁷ apparently had no difficulty in finding 51 patients and in alleviating the symptoms of 46 with tri-iodothyronine. Since these symptoms were mainly those of chronic fatigue, irritability, depression, mental apathy, muscular aching, and the like, a trial with placebos or a double-blind study would at least appear to

be necessary before widespread assertions are made. No such study has yet been reported, although some are being made in the United States. So far it is understood that they have found no substantiating evidence that such a condition exists—that is, a condition of hypometabolism which will respond to tri-iodothyronine but not to thyroxin.

Turning from the practical to the theoretical aspects of this strange condition, how is it to be explained? Kurland and his associates believe that patients with 'metabolic insufficiency' have peripheral insensitivity to thyroxin. The thyroxin does not become converted into its active form, or possibly the presence of tri-iodothyronine is necessary for the metabolism of thyroxin. This certainly sounds plausible, in view of the suggestion of Gross and Pitt-Rivers⁸ that tri-iodothyronine may be the peripherally active form of thyroid hormone.

There is no direct evidence that a condition of tissue hypometabolism due to a defect in production of tri-iodothyronine exists. Kurland⁹ found a slower disappearance of ¹³¹I-labelled thyroxin from the blood of hypometabolic patients than from the blood of normal individuals. However, it is known that in conditions associated with a low metabolic rate a retardation of disappearance of thyroxin may occur and, further, that non-thyroidal material such as serum albumen may also disappear more slowly from the plasma of patients whose BMR is low. Kurland's findings, therefore, cannot be considered as good supportive evidence for the existence of his specific hypometabolic state.

It is to be hoped that no large acceptance of this syndrome will take place in this country. Quite apart from the likelihood that patients might not receive correct treatment for their complaints, the injudicious use of tri-iodothyronine is not without risk to the patient or to his pocket.

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6. Fields, E. M. (1957): *Ibid.*, 163, 817.
7. Morton, J. H. (1957): *Ibid.*, 165, 124.
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UROLOGIESE KLAGTES BY VROUENS

Indien ons die gemiddelde algemene praktisyn sou vra wat een van die mees algemene klagtes is waarmee sy vroulike pasiënte by hom om raad en hulp kom aanklop, sal die mening sekerlik uitgespreek word dat hy heel dikwels pasiënte kry wat oor 'blaasmoeilikheid' kom raad soek. In baie van die gevalle is die sogenaamde blaasmoeilikheid in werklikheid ginekologies van aard en dikwels is die praktisyn self heeltemal in staat om die regte behandeling voor te s krywe. Waar daar egter 'n ernstige leemte in ons behandelingsmetodes is, is op die gebied van urologiese kwale by vrouens.

Dit is alte dikwels die ondervinding van die uroloog dat 'n pasiënt na hom verwys word met 'n geskiedenis van herhaalde aanvalle van 'blaasmoeilikheid' of 'koue op die blaas', wat etlike jare lank al aan die gang is, en waarvoor sy van verskeie geneeshere allerhande behandelings ontvang het sonder enige blywende sukses.

Dit wil voorkom of daar dikwels by die praktisyn die neiging is om enige dame wat urologiese klagtes het, as 'n potensieële ginekologiese probleem te beskou en baie selde primêr as 'n urologiese geval. Kom daar egter 'n manlike

pasiënt wat kla oor herhaalde urinêreinfeksie, sal hy baie gou vir die pasiënt die regte behandeling voorskrywe. Om een of ander rede is daar blykbaar 'n leemte in die algemene praktisyn se benadering van hierdie moeilikheid by die vrou en daar word heel dikwels nie besef dat by menige vrou daar 'n obstruktiwe blaaskwaal teenwoordig is, wat die grondoorsaak van haar moeilikheid is nie.

In baie gevalle is hierdie obstruksie relatief, in die sin dat dit in werklikheid te wyte is aan onvolledige lediging van die blaas as gevolg van gevorderde uitsakking van die blaasbasis. Die aangewese behandeling is dan natuurlik die herstel van die blaasuitsakking. Daar is egter 'n groot groep gevalle waar daar geen besondere afwyking in die blaasbasis gevind kan word nie—'n soort toestand wat ons nogal dikwels teëkom in die nullipara-vrou of in die jong dame—en wat eintlik primêr 'n obstruktiwe toestand van die blaas is. Uit die aard van die saak is dit baie moeilik

om by enige vroulike pasiënt 'n geskiedenis te kry van vermindering in die sterkte van haar stroom of die kaliber van die stroom as sodanig. Trouens, dit is die ondervinding dat baie vrouens wat spesifiek hierom gevra word, onskuldig te kenne gee dat hulle heeltemal normaal water. Na so 'n obstruktiwe letsel verwyder is, is hulle verbaas om te sien wat dit is om normaal te kan water.

Dit is ook van belang om daarop te let dat in baie van hierdie gevalle, waar daar werklike perifêre obstruksie tot die uitvloei van die urine is, daar nie noodwendig 'n baie groot urinêre res teenwoordig is nie; nogtans sal hierdie pasiënte aanhoudende aanvalle van urineinfeksie kry, waarvoor hulle jaar na jaar na hulle dokter gaan sonder dat die werklike oorsaak van die moeilikheid opgelos word. Dit sal goed wees om hierdie moontlikheid in gedagte te hou wanneer hierdie soort pasiënt om hulp aanklop.