further sulphonamide therapy was under consideration in view of the curative value of this procedure in cases of genito-urinary relapse. Progress in this case became, however, accelerated, and ended in a recovery during a feverish cold. The temperature remained elevated for four days and once touched 103° F.—an interesting sidelight on the value of fever therapy, if that were practicable by mechanical or other therapeutic means in the case of a young child.

This case suggests that it is unwise to disregard the importance of concomitant local treatment. I should add, to forestall possible inquiries, that, supplies of sulphathiazole not being available locally, this could not be tried.—I am, etc.,

F. G. MacDONALD.
Assistant Venereal Diseases Officer.
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Endocrine Therapy of Hypertrichosis and Acne

SIR,—I believe that hypertrichosis and acne vulgaris are usually, if not always, based on a general metabolic disturbance, often of neuro-endocrine basis. The fact that they are found in intersexual conditions of endocrine origin and that they disappear when such conditions are treated by appropriate endocrinotherapy and other constitutional methods is one of the many proofs of this conception. Dr. A. C. Roxburgh’s statement (December 20, p. 890) and that of the “authorities on endocrinology” whom he has consulted as to the impossibility of curing hypertrichosis or acne by means of hormones are not considered by me as clinical experience or by that of many others. I have not available all the references on the subject, but at random I can quote the following, of whom the first is one of the greatest living authorities on endocrinology: Mssissou-Fournier, J. C., Presse méd., May 27, 1939; Rosenthal and Kurzrok, Proc. Soc. exp. Biol. Med., 30, 1150; Van Studford, Arch. Derm. Syph., 1935, 31, 3; Lawrence, C. H., and Feigenbaum, J., New. Engl. J. Med., 212, 26; and a very recent paper in the Journal of the American Medical Association, the precise reference to which escapes me.

In speaking of the treatment of acne or hypertrichosis by constitutional methods I do not speak only of endocrinotherapy but the method as practised to-day is useless, for it must be applied as part of a general constitutional treatment. One must remember that everything here depends on diagnosis. If the authorities mentioned by Dr. Roxburgh have tried at random all the hormones on the market on cases labelled simply “acne vulgaris,” no wonder that they obtained no result. There is no hormone for the cure of acne, but there are hormones which cure basic metabolic conditions of acne as a manifestation. These metabolic conditions vary. Thus I have seen acne treated successfully by thyroid, by oestrogens, by chorionic gonadotropin, and by progesterin. Success, then, depends on whether we have diagnosed correctly the basic condition and have treated it adequately. I must add that these deep constitutional diagnoses are difficult to for up to now we have been educated to diagnose “heart” or “stomach” but not the whole man. Thus constitutional treatment, including endocrinotherapy, also is very difficult, long, and exacting, and requires great knowledge of metabolic physiology. However, that such treatment gives results in acne vulgaris and hypertrichosis as well as in many other local conditions of constitutional basis, there can be no doubt.—I am, etc.,

A. P. Cawdias.

SIR,—May I give my full support to Dr. Roxburgh’s criticism of Dr. Cawdias’s Thomas Vicary Lecture.

“Thanks to a few hormonal injections”—repulsively feminized boys cannot be changed into normal virile adolescents, nor “thanks to oestrogenic hormone therapy” can girls with hairy faces and thick dark skin be changed to beautiful and complete womanhood. We may be on the verge of such success, but we have not yet achieved it.

I know of no method more capable of destroying all faith in the practice of endocrinology than such statements, beautiful perhaps as prose poems but born of pious hopes, not of their fulfillment. Endocrine treatment can do much already, and every year does more. Dr. Cawdias does a disservice to endocrinology by lending the weight of his authority to claims which it cannot yet support.—I am, etc.,

Endocrine Clinic, Westminster Hospital.

Raymond Greene.

Epidermophytosis

SIR,—The interesting observations upon the comparative merits of iodine ointment and other measures in the treatment of ringworm infection of the feet in South Africa by Captain B. G. Shapiro (December 20, p. 877) may draw attention to the increasing incidence of ringworm infection of groins and toes in other Services. Ringworm of the groin can most readily be cured by the application of the following paste to the affected sites on three successive days, baths being avoided during this period: Terodon (Glaxo) or cimolgin (Bayar) 2 grams; acid salicyl. 10 grains; zinc oxide 120 grains; starch 120 grains; paraff. mol. 1 oz.

The reaction—reddening and staining of the skin—clears readily when baths are resumed. The treatment is effective in early cases of ringworm of the toes, but chronic cases call for additional measures, among which superficial r-ray therapy is most valuable.—I am, etc.,

JOHN INGRAM, M.D., F.R.C.P.
Leeds.

The Stimulant Action of Iron

SIR,—Your annotation on the stimulant action of iron (November 29, p. 776) may give rise to serious concern among persons responsible for the health of women during pregnancy.

A survey carried out during the last six months in the antenatal department of a large Kentish hospital to determine the haematological condition of otherwise healthy women of the upper artisan and lower middle class revealed that their haemoglobin was lower than in an apparently comparable group examined by Mackay before the war. Five hundred and sixty-six women were seen in the second trimester of pregnancy and showed an average haemoglobin of 77.6% (Price-Jones Haldane scale). Of these 17.7% showed haemoglobin levels below 70%, a proportion slightly higher than the Aberdeen figures on women in poorer circumstances. Follow-through observations on these women showed that the administration of iron in full dosage converts the tendency to fall into a satisfactory rise, rendering them in good condition for delivery and improving their subjective symptoms. With the present difficulties of diet, especially the shortage of the iron-containing foods, it would be undesirable for the therapeutic administration of iron in these cases to be stopped.—We are, etc.,

H. A. HAMILTON.
Farnborough, Kent.

Vitamin B1 and Toxaemias of Pregnancy

SIR,—I was very interested in your survey (November 15, p. 703) of Mr. W. C. W. Nixon’s Blair-Bell Memorial Lecture on diet in pregnancy, May I take this opportunity of expressing the hope that Mr. Nixon’s important investigations on vitamin B1 deficiencies in pregnancy will stimulate us to further work on the problem of toxaemias in pregnancy.

Having been engaged in investigations of toxaemias in pregnancy in Czechoslovakia, I published my first results about vitamin B1 deficiencies in pregnancy and the successful treatment of severe toxic hyperemesis gravidarum with vitamin B1, in 1938 (Zbl. fürl. Gynäkolgie: American Yearbook of Obstet. and Gynec., 1938). I proved then the importance of vitamin B1 for the disturbed carbohydrate metabolism in toxaemias and the relationship between vitamin B1 and the adrenal cortex hormone. The latter was hitherto used alone in the treatment of hyperemesis gravidarum, but the addition of vitamin B1, which 100% of the latter showed disturbances of B-excretion in the urine, are evidence that there is an established correlation between toxaemias and B1 metabolism. The recent papers of E. Chalmers Fahmy in Edinburgh and A. J. Ballantyne in Glasgow on hyperemesis gravidarum have given further support to the view that lack of vitamin B1 is an important factor in the aetiology of this toxaemia.

There are, we know, several factors in the causation of toxaemias. The lack of B1, vitamins may be one of the main
links in the pathogenesis of pregnancy toxæmias, particularly in hyperæmio gravidarum. In this disease a state of inanition and altered hormonal conditions associated with pregnancy lead to B deficiency. In consequence, an increased B utilization is set up with damage to the tissues. Evidence of this is found in the clinical picture of B deficiency in large numbers of paraffinRoyal Infirmary for this condition, 1935. Cholecystectomy was done the following month. In June, 1938, the diagnosis of pernicious anaemia was established following an operation for excision of an old (22 years) appendicectomy scar which had herniated. He reacted well to liver therapy. Three months ago he had a severe attack of ulcer pain, which was soon followed by a recurrence of marked macrocytic anaemia. It appears possible that the production of intrinsic factor might be interfered with by gastric (and, possibly, by hepatic) lesions, in addition to being a sequel of gastro-enterostomy.—I am, etc.,

Llanharan.

Ben Samuel.

Sciatic Pain

Sir.—I have read with great interest the leader (Journal, November 15) on sciatic pain. Unfortunately the writer has apparently overlooked some papers bearing on this subject, although published in this country. In a letter to the Lancet (August 2, 1941) I have remarked very briefly on sciatica. In my experience one has to distinguish between a true or nervous sciatica—which is apparently very rare—and a pseudo-sciatica or muscular sciatica, which is very common indeed. In the Lancet (1940, 2, 326) and Practitioner (1941, 146, 167) I have described muscular sciatica as due to a myalgia of hip muscles. The muscles affected are as a rule the quadratus lumborum, glutaeus maximus and medius, tensor fasciae latae. The disease can be diagnosed objectively by what I termed "myalgic spots." The be confirmed conclusively by injection of 1 to 2 c.c.m. of 1% procaine into each myalgic spot. Provided the myalgic spots are accurately located and properly injected a permanent cure can be effected within a short time.

In the Army I have treated so far more than 400 cases of myalgia: among them were fifty cases of hip myalgia which caused the syndrome of sciatic pain. In some cases sciatosis, wasted muscles, and absent ankle-jerk were found. All cases of sciatica but one could be cured in a short time. This case, still under treatment, was proved by means of pentothal anaesthesia to be due to simulation of sciatic pain. I have not been able to publish my results on sciatica and other forms of so-called neuritis because the most prominent medical journals have been suffering for many years from lack of space.

A very important point requiring elucidation is the term "tender spots," very often used in the literature. The diagnosis depends on the fact that the spots are tender to pressure—that is, the patient complains of pain on pressure. But evidently the diagnosis is thus based on a subjective phenomenon, although most of the authors do not appear to have realized it. Moreover, the phenomenon, exasperation to the responsive area of pain varies greatly in different subjects or patients. There are "nonsensitive," "hyposensitive," and hypersensitive patients, probably owing to the fact that the threshold of pain differs individually.

Now medicine is, or ought to be, practised on the lines of an applied science. It must, therefore, be our endeavour to base our diagnosis on objective criteria whenever possible. On the other hand, I have based the diagnosis of myalgia on "myalgic spots," which are located in anatomical points of a muscle and characterized by objective criteria independently of what the patient says. The explanation of the fact that myalgic spots in quadratus lumborum, glutei, and tensor fasciae latae muscles give rise to pain referred to the posterior aspect of thigh and leg is apparently to be looked for in the law of dermatomes. Clinical observations have shown that pain as mapped out by the patient himself is delineated at least approximately in skin areas supplied by segments of the spinal cord—so-called dermatomes—and originates in muscles supplied by the same segments. Now the quadratus lumborum is supplied by L 1-4, glutaeus maximus by L 4-5 and S 1-2, glutaeus medius and tensor fasciae latae by L 4-5 and S 1—namely, those segments of the cord which supply the posterior aspect of thigh and leg down to the heel.

The pathology of myalgia—rheumatic, traumatic, or idio-
pathic—is unfortunately not known at present. But an inflammatory process—a myositis—appears to me to be an assumption which does not account for the facts as known to-day. It is a fact that injection of 1 to 2 c.c.m. of a 1% procaine cures the myalgic spot definitely and permanently. It is extremely unlikely that a local inflammatory or suppuration process in muscle of any other organ without delay. On the other hand, I have tentatively put forward (Brit. J. Phys. Med., 1938, 1, 302) the working hypothesis that the clinical or dynamic pathology of myalgias consists in a localized or circumscribed relative vasoconstriction, confined to the myalgic spots only and due to stimulation of sympathetic vasoconstrictor fibres. It would appear that this hypothesis accounts for the main symptoms of the disease—namely, (1) pain, (2) temporary loss of power (paresis), and (3) paraesthæsia (pins and needles, etc.). Owing to lack of space I cannot discuss here the theory of the procaine effects. The whole theory of pain and its control by procaine will be given in extenso as soon as it is possible to publish a paper of so theoretical a character in the medical press.—I am, etc.

M. Good, M.D.,
Lect., R.A.M.C.

Sacro-Iliac Strain

Sir.—The excellent article by Dr. James Cyriaux under this heading (December 13, p. 847) introduces some points of anatomical interest which do not appear to be appreciated by the author. He states that "the sacro-iliac joint is like the acromio-clavicular joint in that no muscle spans it; hence it relies for stability on its capsular ligament alone." He later includes the sterno-clavicular joint in this category. The sacro-iliac joint is most certainly spanned by muscles, as is the acromio-clavicular joint (deltoid and trapezius) and the sterno-clavicular joint (sterno-mastoid).

Orthopaedic surgeons tell us that there is no ligament in the body "worth a damn" when subjected to strain, and, while this sweeping statement might be challenged, it contains more than an element of truth. It is certainly true that no joint in the body relies for its stability on ligaments alone. Few joints are sub-
nominal as is the sacro-iliac articulation, and if it had to rely for its stability solely upon its capsular ligaments we should soon be forced to revert to the pronograde position, for the capsular ligaments of this joint are notoriously thin and weak. Fortunately Nature has materially strengthened her defences in this region by the provision of: (1) exceptionally powerful extracapsular ligaments (namely, the long and short