Correspondence

British Medical Journal

8 March 1969

SIR,—In the leading article on "Anatomy for Surgeons" (22 February, p. 462) is discussed the topography of the Primary F.R.C.S.

The article states, "The anatomical part of this operation is far different from the terror of former years, especially as half the examiners are practising surgeons." But surely this latter fact is exaggerated. I well remember in my Primary in 1910 being examined by the late James Sherren, known to us as the Skipper, and very much in active practice. Personally I would have much preferred to be questioned by Sir Arthur Keith.—I am, etc.,

DUNCAN WOOD.

Hallaton, Near Bristol.

Vitamin P

SIR,—I read with interest your informative review of the present state of knowledge available about the clinical value of vitamin P (25 January, p. 235). My report of a pilot clinical double blind trial is quoted and also the comments of Haeger, who repeated the study. In most reports dealing with the use of flavonoids the lack of objective methods of assessment is very apparent, as is pointed out in your review. This lack of suitable objective indices in the assessment of venous insufficiency has bedevilled many reports, including my own and that of Haeger. At the Third International Congress of Phlebology I reported on my experience in the treatment of 5,000 limbs by compression sclerotherapy and made a plea for standardization of terminology, regardless of methods of therapy, to overcome the present confusion in the presentation of data on venous insufficiency.

At the Fifth European Conference of Microcirculation I reported my provisional findings of the influence Paroven (tromerutin) had on peripheral blood flow in two small groups of patients: one with chronic arterial disease, the other with chronic venous insufficiency. Significant increases in arterial blood flow have been found, measured by strain-gauge plethysmography, during chronic administration of the drug. Furthermore, these increases are reversed to initial levels on withdrawal of the drug. As Paroven is not a vasodilating agent, and it has apparently no significant influence on blood pressure or heart rate, it would seem that the influence of Paroven is on the peripheral resistance vessels. In those subjects depending largely on collateral arterial blood supply in their legs not very large changes in blood flow volume were found, but the rate of delivery of the blood volume was significantly increased—that is, the maximum blood flow to time was favourably changed. These preliminary findings have since been confirmed by further investigation.

I am at present assessing peripheral resistance in these patients. It is hoped that the results of these objective methods of assessment will lead to further studies, and eventually the uncovering of the true principle in the flavonoid group. I am, etc.,

DERmot E. FitzGerald.

Department of Medicine,
Guy's Hospital Medical School,
London S.E.1.

REFERENCES


Phlebologie, 1968, Amsterdam.

Microcirculation, Gothenburg, 1968, Bbl. anat.
No. 10.

SIR,—Having read the Today's Drugs article (25 January, p. 235) on flavonoids (vitamin P), I would like to report the following.

A male patient, aged 52, developed polycthymia rubra vera in 1961 and was treated with radioactive phosphorus and venesection. Owing to this condition he had sustained a right retinal thrombosis causing practically total blindness and also a cerebral thrombosis resulting in monoplegia of the left arm. On 11 November 1966 he was admitted to another hospital complaining of pain and discoloration of the left great toe. The patient had a history of venous long-distance running.

The patient was treated with venesection and three pints (1.7 l) were taken off. His haemoglobin fell to 126%. On 16 November he was given 5 ml of radioactive phosphorus intravenously, and was discharged a day later. On 20 April 1967 the left fourth toe became gangrenous and a digital thrombosis of the fourth digital artery, and the possibilities of lumbar sympathectomy or amputation were considered. Despite local treatment with gentian violet and ampicillin systemically the condition did not improve. On 1 May he was put on Paroven, one 250-mg tablet four times a day, and Soфia tulle dressings. Within two weeks the condition had improved considerably and six weeks later healing was complete.

The result reported here and the experiences of Sørensen and Hansen (personal communication) suggest that further studies should be carried out on Paroven in small peripheral arterial occlusive conditions would appear to be justified.

—I am, etc.,

London S.W.17.

E. D. M. Tod.

Hypophysectomy in Breast Cancer

SIR,—With regard to your recent leading article on the treatment of advanced breast carcinoma (1 February, p. 265) I would just like to point out a most recent advance in the technique of pituitary ablation.

In the article no mention was made of the effect of ultrasound on the pituitary. In my experience the effect is immediate and represents the least disturbing and simplest approach to this form of treatment. As you so rightly point out, the approach to an E.N.T. surgeon is quite simple through the sphenoid sinus, and produces little upset in the patient. He reaches the sphenoid sinus equally a simple matter to cause the dura over the pituitary, and through this the ultrasound is applied direct. You will note that there is thus no necessity for opening the skull. What could be simpler? This procedure has been carried out here, and I have also seen the effects of it on the Continent.—I am, etc.,

Leicester.

JOHN C. JENKINS.

Trichomoniasis and Gonorrhoea

SIR,—It is generally known that Trichomonas vaginalis is often associated with gonococcal vaginitis in females, but its true incidence is unknown, especially in males with gonococcal urethritis. Trichomonas vaginalis is a cause of paroxysmal purulent vaginal discharge with marked vulvitis in females. It is easily diagnosed from a fresh high vaginal smear using dark ground microscopy. In males its diagnosis is difficult and at best unsatisfactory. This does not mean that they are immune from infestation with Trichomonas vaginalis, which frequently gives rise to only minimal symptoms and signs, and is too often treated as "non-specific" urethritis with antibiotics without any response. In order to establish its carriers, unless specific treatment has been given. As Trichomonas vaginalis is almost always transmitted sexually, the common practice is to treat both partners and carriers simultaneously. In females the treatment is routine when Trichomonas vaginalis is thought to be the cause of a vaginal discharge. Regrettably, this is all too frequently practised without either clinical or microscopic examination to eliminate the possible association of gonococcal urethritis in the patient. An attempt was made to find out the relative incidence of these infections in the female patients attending the West London Hospital Clinic for the years 1965-8. Of 1,335 patients with gynaecological complaints, 620 (47%) also had trichomoniasis. It is fair to assume that the relative incidence in male patients with acute gonorrhoea is roughly the same. In order to prevent the spread of gonococcal urethritis the spread of Trichomonas vaginalis may be prevented by using antibiotic prophylaxis.

What is of greater importance is the fact that out of 1,335 patients who presented with trichomoniasis 620 (47%) had associated gonorrhoea. Patients with trichomoniasis should therefore be carefully screened for the presence of possible associated gonorrhoea.

With the continuing rise in the incidence of these infections their correct management is of utmost importance. It is suggested that
the high association between trichomoniasis and gonorrhoea should be borne in mind in the management and treatment of these infections when the presence of either cannot be discounted totally, and when symptoms persist after re-infection occurs in the partner concerned.

I am grateful to Dr. J. L. Fluker for his advice, and for making this report of cases under his care possible.

—I am, etc.,

W. TSOLO
West London Hospital, Charing Cross Group, London W.4.

Farmer's Lung

SIR,—This condition is now well recognized in many areas as a cause of disabling industrial disease in agricultural workers, but it may be less well known that it can affect other members of the farming community. In the last two months we have seen three farmers' wives with this condition. They were all about 30 years of age, and two did nothing more than feed a few calves, but one did help her husband in farm duties, and was regarded by her husband as a "good worker."

In view of the long-term effects of this condition, early recognition by the family doctor is of supreme importance. An acute or subacute respiratory illness with dyspnoea of a non-wheezy type, particularly if accompanied by cyanosis and exceptional tachycardia, should arouse suspicion and blood should be sent for Microsporopsa faeni (T. polyposa) precipitins. Chest examination may show some areas of fine rales, and the x-ray a fine "groundglass" mottling in some or all of the lung fields, but these findings may be relatively transient. Ventilatory tests show a marked reduction in the forced vital capacity, but there is usually a smaller drop in F.E.V.1.

Steroid therapy usually leads to dramatic clinical improvement, and we believe it should be initiated as soon as the diagnosis is made. Ideally dosage and duration of treatment should be decided in conjunction with the respiratory laboratory, but if this is not available 15 mg. of prednisone daily should be given for two weeks, and then a slow reduction controlled by clinical findings for a further six weeks at least. It is essential that contact with the suspected hay dust should be broken absolutely, and the value of an agricultural mask in preventing further attacks is very doubtful.—We are etc.,

G. E. ADKINS.
Ivybank Chest Clinic, Esher, Devon.

Vitamin B12, Serum Folate, and Hypochromic Anaemia

SIR,—The presence of hypersegmented neutrophils in the blood films of many patients with hypochromic anaemia prompted us to ascertain the serum folate and vitamin B12 concentration in patients referred to this laboratory by general practitioners. Altogether 161 patients (128 women and 33 men) presented with hypochromic anaemia. The serum folate1 was determined in every case, and the serum vitamin B12 concentration (a strain of Euglena gracilis) in 156 cases. For comparison with this group, serum vitamin levels were determined also in 101 patients who were not anaemic and had also been referred by their general practitioners. These controls were matched as far as possible according to age and sex with cases in the first group.

Table I.—Serum Folate Levels. (Normal Range 3 5 to 12 ng/ml.)

<table>
<thead>
<tr>
<th>Number of cases</th>
<th>Range of serum folate (ng/ml.)</th>
<th>Hypochromic Anaemia</th>
<th>Normal Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean folate (ng/ml.)</td>
<td>Standard deviation (ng/ml.)</td>
<td>Error of the difference (ng/ml.)</td>
</tr>
<tr>
<td>161</td>
<td>0-8 to 12-7</td>
<td>4-9</td>
<td>2-5 to 11-9</td>
</tr>
<tr>
<td>101</td>
<td>1-4 to 2-4</td>
<td>2-0</td>
<td>5-9</td>
</tr>
<tr>
<td></td>
<td>2-5 to 3-4</td>
<td>3-3</td>
<td>22</td>
</tr>
</tbody>
</table>

As shown in Table I, subnormal levels were found in 25% of patients with hypochromic anaemia and in 6% of controls (P<0.01). The mean folate of 49 ng/ml. in the hypochromic anaemics was significantly lower than that of 5 9 ng/ml. in the controls.

Table II.—Serum Vitamin B12 Concentrations. (Normal 150 to 800 pg/ml.)

<table>
<thead>
<tr>
<th>Number of cases</th>
<th>Range of serum vitamin B12 (pg/ml.)</th>
<th>Hypochromic Anaemia</th>
<th>Normal Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean vitamin B12 (pg/ml.)</td>
<td>Standard deviation (pg/ml.)</td>
<td>Error of the difference (pg/ml.)</td>
</tr>
<tr>
<td>156</td>
<td>20 to 728</td>
<td>327</td>
<td>162</td>
</tr>
<tr>
<td></td>
<td>161 to 840</td>
<td>381</td>
<td>19-3</td>
</tr>
<tr>
<td></td>
<td>100 to 149 pg/ml.</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>100 to 149 pg/ml.</td>
<td>11</td>
<td>0</td>
</tr>
</tbody>
</table>

Likewise there was a significant difference between the mean serum vitamin B12 concentration of the anaemic patients, which was 327 pg/ml. and that of the controls at 381 pg/ml. (Table II). All the controls had a normal serum vitamin B12, while 10 patients with hypochromic anaemia (6 4%) presented with a level of less than 100 pg/ml. and in a further five it ranged from 100 to 149 pg/ml. (P<0.01).

Hypersegmentation of neutrophils was observed in the blood films of 35 patients with hypochromic anaemia, but only 25 of these had subnormal serum folate or B12 levels; conversely, no hypersegmented neutrophils could be found in the blood of 36 anaemic patients with abnormally low serum B12 or folate levels, nor in any of the control cases.

This preliminary study has thus confirmed that the signs of hypochromic anaemia frequently mask an underlying vitamin B12 or folate deficiency. It has also shown that, while the presence of hypersegmented neutrophils in stained blood films is a useful pointer in such cases, it is by no means a reliable substitute for serum vitamin assays.—We are etc.,

P. H. JOHNSON.
I. FORREST-HAY.
C. GILES.

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REFERENCES

Transfusion and Perforation

SIR,—In reference to the recent articles concerning colonic perforation and exchange transfusion (9 November, pp. 345 and 349) one could dispute the argument that the umbilical venous catheter is a source of the problem of itself. Where the catheter ends up during exchanges is a moot point, as we do not normally perform radiological studies of this. The catheter may be in radiographs of the portal system, dactus vesicae, hepatic veins, inferior vena cava, or even in any of the cardiac chambers. One certainly notes pressure changes in the system when a child cries during exchange transfusion, and one would doubt if the slow injection of blood during an exchange in itself can lead to unphysiological pressure changes in the system.

The point which intrigues me in relation to the technique of exchange is the type of blood used. In Sheffield citrated blood is supplied for exchange transfusion, and I note that in the paper by Drs. R. Orme and Sheila M. Eades in two instances they used calcium supplements during the exchange, which suggests the use of citrated blood.

We have known for a long time the metabolic problems of citrated blood—the initial low pH and the undesirable effects that this may produce during an exchange transfusion. It seems to me a reasonable proposition worthy of pursuit, that the type of blood used during the exchange may have had some bearing on any vascular lesions which may have led to perforation of the gut.

I would be interested to know the type of blood used in the cases recorded by the Sheffield and Devon workers.—I am, etc.,

D. A. D. SMITH.

Preperitoneal Prosthetic Herniorrhaphy

SIR,—I am grateful to Mr. N. O. K. Gibbon (18 January, p. 187) and Mr. J. M. Buchanan (25 January, p. 256) for replying to my letter briefly describing preperitoneal prosthetic herniorrhaphy (29 December, p. 832) and for their comments.

However, I hope that Mr. Gibbon does not imply that there is no room for further thought and innovation on the common problem of treatment of groin hernia. Excellent though Mr. Gibbon's treatment results are, other accounts of operation follow-up quote recurrent rates of 5-10% for indirect and up to 25% for direct inguinal hernias,1 and it is these figures which I consider justifies the rethinking of groin hernia treatment. Mr. Gibbon's reference to extended operations is surely not applicable to preperitoneal prosthetic herniorrhaphy, as this is simple in concept and easy in execution. Although I do not advocate its general adoption at this stage I can assure him that no hazards or untoward complications have been encountered in its application. It takes no longer to perform than a standard operation and for bilateral cases is materially less time-consuming. The technique is applicable without variation to inguinal hernia both indirect and direct, femoral hernia, recurrent hernia, and hernia en gisssade; it is particularly advantageous for the recurrent case.