the hyperaemic stage of recovery pain is common and may continue as a late sequel. Those interested are referred to excellent recent accounts of the condition (Ungley *et al.*).

One further cause of pain in the feet should perhaps be briefly mentioned; it is difficult to classify, but probably lies within the personal experience of most individuals. This is the common type of **cramp** which may affect the muscles of the feet. It occurs in states of dehydration such as cholera, in states of salt deficiency as "Stoker's cramp," and is common during pregnancy. It is not uncommonly experienced by normal individuals in bed at night, especially after an unusual degree of physical exertion. The cause is unknown, although in some cases it can be relieved by the administration of common salt. Quinine is also alleged to prevent attacks, but it is not permissible to use this drug at present for any purpose other than the treatment of malaria.

In this article greater attention has been paid to the types of pain which arise from peripheral vascular disease than from other causes. This has been done because pain is so commonly a presenting symptom in such conditions, and because differential diagnosis affords greater difficulty to most physicians; more is also known about the mechanism of the pains which may occur. Even so, many important vascular conditions have been but briefly discussed, and unfortunately it has proved impossible to deal with the treatment of such a large number of diseases. For those whose interest has been aroused the following books and articles can be recommended.

REFERENCES

- DUNLOP, D. M., DAVIDSON, L. S. P., and MCNEE, J. W. (1942), *Textbook of Medical Treatment*. Edinburgh.
 HOMANS, J. (1936), *Circulatory Diseases of the Extremities*. New York.
 HUNT, J. (1936), "The Raynaud Phenomena. A critical review," *Quart. J. Med.*, Vol. 5 (N.S.), 399.
 LEWIS, T. (1936), *Vascular Disorders of the Limbs*. London.
 LEWIS, T. (1942), *Pain*. New York.
 SAMUELS, SAUL S. (1936), *The Diagnosis and Treatment of Diseases of the Peripheral Arteries*. New York.
 UNGLEY, C. C., and BLACKWOOD, W. (1942), *Lancet* (ii), 447; (1943), *Lancet* (i), 681.

BOOK REVIEWS

PRINCIPLES AND PRACTICE OF WAR SURGERY

By J. TRUETA, M.D. Wm. Heinemann, Ltd., London, 1943. Price 42s.

A good monograph is always a pleasure to read, for it introduces the reader to the author in a way that no omnibus book can. One is impressed by the apparent enthusiasm and energy of the author, as well as by the width of his study and research. It is a book that every surgeon undertaking war surgery ought to read. It is not written from the recollections of any previous campaign, but is right up-to-date. The author's experience is probably greater in this respect than any other living surgeon. He thinks clearly, and takes the greatest care to found his practice on sound principles. The young surgeon especially, who is going to do forward work in the field, should make a most careful study of these principles as set out so clearly in this book if he is going to do the best he can for the wounded. One can imagine Trueta as a man of boundless energy and enthusiasm. One wonders whether he has an irrepressible sense of humour, and wrote with his tongue in his cheek when he drew attention to "sessile histiocytes of the lymphatic glands." At any rate, the reviewer had not the slightest idea what this meant.

The first part of the book deals with the pathology of wounds and the treatment of the wounded

patient, and it is upon a proper appreciation of this that the technique of wound surgery in a five-point programme set out in part two is founded.

In the pathology, a new conception of shock is outlined which must come as a surprise to many surgeons. According to Trueta, shocks starts with a rise in blood pressure, though this may be very transient. There is a tendency for pathologists to agree with this conception of shock, and it certainly explains some of the phenomena.

The book deals almost entirely with injuries to the limbs, and it does not deal with wounds of the head, chest and abdomen, but these three regions as far as the war surgeon is concerned are apt to be dealt with in special centres; moreover, wounds in these regions form a very small proportion of the casualties admitted to hospitals, since so many of them are immediately fatal. Trueta's book will therefore cover at least 90 per cent of all casualties admitted to any hospital after an air-raid or from the battlefield.

Dealing with any small points of criticism; penile, aortic and sternal marrow transfusions are, in this country at any rate, unlikely to have many advocates, and most surgeons would prefer to dissect out a vein rather than rely on such methods.

The sterilisation of plaster shears before removing a plaster is so obviously good that one wonders that it has not been more generally employed. Trueta's notes on plaster of Paris technique will prove very helpful to any surgeon undertaking war surgery. His method of dealing with wounds has sometimes been held to be that of Winnett-Orr, but Trueta, while giving full credit to Winnett-Orr,

sets out clearly the difference between their two methods of treatment. Winnett-Orr did not combine excision of the wound with the treatment usually associated with his name.

The number of names in the Bibliography amounts to close on 500, which indicates the amount of study and research that Trueta has undertaken.

The chapter on "Amputation" is to be most highly commended, and one would only suggest that to the extremely useful directions given, the advice should be added that, wherever possible, a relatively inexperienced surgeon should obtain the opinion of a more senior colleague before amputating, for, as Trueta points out: "The diminution in the number of amputations is undoubtedly a consequence of improvement in surgical technique, and is one of the most eloquent proofs of the advance in surgery."

ADOLESCENT SPONDYLITIS

By S. GILBERT SCOTT. Oxford University Press, London. 1942. Price 15s.

This is a monograph on adolescent spondylitis. Most reviewers will agree that the type of book which is most difficult to assess is the class which has a pre-judged issue as its basis for it produces in the reviewer that type of irritation which always follows hasty and ill-balanced conclusions. This is not to say that the late Dr. Scott's book is without value for it is indeed of great value.

His thesis is that the syndrome known as ankylosing spondylitis is in every case preceded by certain X-ray appearances in and around the sacro-iliac joints. Although he was by no means the first man to adumbrate such a conclusion, the literature of the disease he briskly accounts for in one and a half pages. The ancient history of the disease has the same amount of space, and then we come to his own personal conclusions.

There is no doubt that in a great number of cases—certainly the majority—he is perfectly correct in what he says, but it would have been better to have stated the case from a less one-sided angle. The second part of the book deals with wide field radiation and the reviewer has little personal experience of this method and so is not in a position to evaluate it. The truth seems to be that wide-field X-ray therapy has a place in the treatment of the disease and that it may be in certain cases curative. The difficulty may be that the time taken for its effects to appear may be so long that the disease may have advanced by that time to a more severe state and it is probable for this reason that modern opinion seems to prefer high voltage X-ray.

In conclusion it should be said that Gilbert Scott was a pioneer, an enthusiast and an imaginative radiologist, and his work was considered to be of sufficient importance to be supported by the Nuffield Trust and in some sense this was a personal tribute to the man himself.

VITAMIN THERAPY

Clinical indications for the use of VITAMIN B₆ (PYRIDOXINE)

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In cases where massive doses are indicated pure vitamin B₆ (Pyridoxine) is available in 10 mg. Tablets and 50 mg. Ampoules.

¹ *J. Amer. med. Assoc.* (1941) 117, 1496.

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