performed by Mr. Broster, under local anaesthesia, 29 hours after the injury. On the third day sensation was improving, but there was no motor recovery. She had a slight haemoptysis and pyrexia due to injury of the lung, associated with fracture of the twelfth rib. On the fifth day open reduction was attempted, but was abandoned on account of her very poor condition, due to her injured lung. A plaster bed was made and mounted at once in the theatre. After six weeks she was moving all the muscles of her right leg and also the left toes. Up to this time attempts at open reduction were still contraindicated by her poor general condition. At the seventh week I inserted a graft, 5 in. by 1/2 in., from the tibia on to the right side of the three spinous processes above the injury and to the left side of the lower three spinous processes. She was nursed for twelve weeks in a plaster bed on her face. At the eighth and ninth weeks root pains were severe and were not controlled by morphine. They have not recurred since.

Exactly six months from the injury she was able to walk unaided and without any instrument. On the same day the suprapubic catheter was finally removed as bladder function was normal. The bladder had remained uninfected throughout.

I should like to thank Mr. R. L. Broster for performing the suprapubic cystostomy and also Dr. Arthur Sunderland, Mr. Citron, and Mr. Beer for their great help in this case. Finally, the patient is greatly indebted to all the nursing and physiotherapeutic staff, especially to Sister Hopney for her help and for the nursing which this difficult case required.

E. H. HAMBLY, M.B., B.S., F.R.C.S.,
Surgeon, E.M.S.; Royal National Orthopaedic Hospital, Stanmore.

Thrombocytopenic Purpura and Tooth Extraction

The following case of dental extraction in a patient with thrombocytopenic purpura may be found of interest.

CASE HISTORY

The patient, a married woman aged 27, had been treated for profuse menorrhagia when 15 years old. Several blood transfusions did not improve the girl's condition, and finally in 1933 a subtotal hysterectomy was performed to prevent her dying from blood loss.

She was first seen in the Dental Department of St. Nicholas' Hospital, Plumstead, on June 22, 1944, with a note from an outside doctor requesting dental extraction and saying that the patient was a haemophiliac. She had complained of severe toothache for the last four weeks, the tooth involved being $\overline{8}$. There was a definite history of bleeding tendency—i.e., bruises appear after insignificant traumata, and small cuts bleed for days.

Haematological Findings.—June 26, 1944: R.B.C., 4,150,000 per c.mm.; Hb 86%; C.I., 1.04; W.B.C., 8,000 per c.mm.—polymorph neutrophils 80%, basophils 2%, lymphocytes 15%, monocytes 1%, Türck cells 2%. Stained film, normal. Platelets, too few for accurate counting, but about 4,000 per c.mm. Hess's capillary resistance test, positive; a good crop of petechiae. Coagulation time, 2½ minutes (within normal limits); bleeding time, 15½ minutes (normal 2 minutes); Prothrombin time, 19.4 seconds (within normal limits). The patient belongs to Group O, and was found to be Wassermann- and Kahn-negative.

In view of the above findings a condition of essential thrombocytopenic purpura was diagnosed.

Management of Case.—The woman was admitted to hospital on July 6. The next day, at 10 a.m., blood was collected from two Group O blood-donors, to supply lacking platelets; normal blood transfusion was given. Immediately afterwards, at about 10.15 a.m., a slow intravenous drip transfusion was started with the fresh blood, found to be compatible. At 1 p.m. premedication, consisting of omnopon gr. 1/3 and scopolamine gr. 1/150, was administered. At 2.15 p.m. the patient was ready in the operating theatre, the intravenous blood drip being continued. 5 c.cm. of pentothal sodium (0.25 g.) injected into the rubber tubing of the blood-transfusion apparatus was sufficient to induce satisfactory anaesthesia. The tooth was extracted; it was carious and septic. The tooth socket was then lightly plugged with gauze impregnated in freshly prepared 1 c.cm. stypven solution. A clot in the socket was seen to form about 5 minutes after extraction. No further bleeding from the gum occurred. At 4.30 p.m. the blood transfusion was stopped. The total quantity given was 800 c.cm.

On the morning of July 8 the red cells numbered 5,140,000 per c.mm., and the haemoglobin was 100%. Stained film, normal; platelets, 82,000 per c.mm.; Hess's capillary resistance test, positive but far less marked; coagulation test, 1 minute 40 seconds; bleeding time, 3 minutes.

The patient was discharged on July 9 after making a successful recovery without further blood loss. When I examined her on July 14 her condition was still satisfactory.

COMMENT

Dental extraction in a patient suffering from thrombocytopenic purpura should be considered a major medical and surgical problem. Admission to hospital or similar institution is essential, because it affords facilities for blood transfusion, general anaesthesia, and collaboration of dental surgeon, physician, and pathologist if necessary.

All haematological examinations were performed by Dr. Holman, assistant pathologist to the Lewisham Group Laboratory. Dr. A. I. Suchecki's assistance as the physician in charge was invaluable in connexion with this case.

JAMES W. WHITE, L.D.S.Eng.

Reviews

ANAESTHETIC PRACTICE

Fundamentals of Anesthesia: An Outline. Second edition. (Pp. 231; illustrated. No price given.) Chicago: American Medical Association Press. 1944.

The authors form the Subcommittee on Anesthesia of the National Research Council of the U.S.A. Their names are already well known and respected in British anaesthetic circles, and this book confirms that they are men of wide clinical experience. Throughout emphasis is laid on those fundamentals of anaesthetic practice that make for safety. Barely a page but contains a pithy gem of wisdom worthy of hanging as a text in anaesthetic rooms. Two typical examples are: "The good anaesthetist observes the whole patient, not just the head"; and "Noisy breathing is obstructed breathing, but obstructed breathing may not be noisy." The illustrations, though comparatively few for an instructional book, are all helpful: the diagrammatic ones in particular drive home their lessons with force. In the section on general anaesthesia the choice of a particular agent is rightly given second place to principles and method—a point of view as yet not fully appreciated in this country. In the section on local anaesthesia, techniques of doubtful practical value, such as trans-sacral and sciatic nerve block, are included. These are hardly "fundamental," and by their exclusion more space could have been devoted to procedures which are of accepted utility, like regional anaesthesia for abdominal operations. Here and there geographical bias is suspected; outstanding examples occur in the description of spinal anaesthesia. Heavy nupercaine, popular in this country, does not receive mention, and exception must be taken to the statement that the dosage of a spinal anaesthetic drug should be based on the weight of the patient.

The style is didactic and dogmatic—all to the good in a book of this kind. The predilection for tabulation—reminiscent of the "synopsis" style of writing in this country—makes the reading a little difficult but does not detract from its value. Doctors who, without special training, are likely to be called on to give anaesthetics will find this book a friend; the advice it gives is sound and can be followed with confidence. To the teacher of anaesthetics it should have no less an appeal; he will find in it many an aphorism that will delight and benefit his pupils. In addition it provides a concise and pithy summary of current American views on anaesthetics.

MEDICAL DISEASES OF WAR

Medical Diseases of the War. By Sir Arthur Hurst, D.M., F.R.C.P. Fourth edition. (Pp. 511; illustrated. 21s.) London: Edward Arnold and Co.

A book which attains four editions during the war has thereby proved its value, and stands in little need of commendation from us. Having reviewed the third edition comparatively recently (1943, **1**, 321) we will confine our remarks to certain new features. Infective hepatitis is now the most important infection in the British Army, presumably due to a virus conveyed by droplet infection, sometimes by those suffering from subclinical attacks. Biopsy proves that it is a true hepatitis, the extensive necrosis found post mortem being due to subsequent autolysis. A curious feature is the ravenous appetite which may follow the initial anorexia. Stress is laid on the sensitivity of the liver to alcohol after an attack, and total abstinence for at least a year is urged, for even moderate amounts are liable to cause cirrhosis. Readers of this *Journal* are aware that Sir Arthur Hurst had very definite views on sciatica, and will not be surprised that the chapter on this subject has been written in his best controversial style. The introduction of sulphaguanidine has changed the treatment of bacillary dysentery, and attention is called to the fact that the intestinal lesions are not caused by the local action of the bacilli but by their toxins absorbed by the colon. Therefore the former treatment was to wash these out by salines as quickly as possible, and to neutralize them after absorption by antidysenteric serum. Now, however, as one can prevent the formation of toxins by destruction of the bacilli by chemotherapy, salines are unnecessary, though serum is still useful