chorea in the third year, and in the fifth a severe attack of urticaria, during which endocarditis was discovered. It occasionally occurs in very severe cases of what is called purpura rheumatica, but it must be rare. The complication was not present in the long series of cases on which Platt based his article. I saw with Dr. Musser a boy with arthritis, purpura, and fever, in whom under observation a loud mitral murmur occurred, which persisted after convalescence. In the septic forms of purpura associated with gonorrhoea, puerperal fever, or a local skin lesion endocarditis is more common and is usually latent.

Respiratory Complications.

In the various forms of purpura respiratory symptoms are not common, but there have been in my series several cases with very remarkable and serious features. In No. II, a boy, aged 10, had for five years an extraordinary sequence of skin lesions, purpura, urticaria, oedema, and erythema. In several attacks he had a bronchial wheezing; then asthma and emphysema came on, and he died in an acute attack of pneumonia with pericarditis. In No. XXVI, a girl, aged 24, with recurring attacks of erythema and purpura, had severe pneumonia during an outbreak. Five months later she died of acute nephritis. No. XI, a child, died of pneumonia a month after an attack of purpura.

The association of asthma and urticaria is an old story. In a case of whooping-cough in an adult asthma persisted for more than eighteen months, and the attacks were associated with intolerable itching between the shoulders and very often an outbreak of urticaria in this region.

Very serious respiratory complications occur in angioneurotic oedema. Dyspnoea may follow great swelling of the neck externally, or, as in a girl from California, seen with Dr. Hale White, the swelling of the tongue and the fauces may be sufficient to obstruct breathing.

The chief danger is oedema of the glottis. Two members of the New Jersey family I have reported died from this cause; both father and daughter as reported by Griffith,³⁰ and a man aged 21 had tracheotomy performed twice, and in a third attack died before assistance could be reached.³¹ The oedema may be in the trachea, as in the extraordinary case reported by Rudolf.³² A woman aged 63 began to have attacks of erythema and oedema affecting, in the course of three years, lips, nose, ears, legs, and face, usually transient. Twice the mucous membrane of the trachea became swollen, causing great stridor; the second attack proved fatal.

Among other complications may be mentioned the frequency with which the spleen is enlarged; the liver, too, may be swollen. In one case a woman aged 50 was admitted with purpura, abdominal pain, and a temperature of 104°. The pain was high in the region of the gall bladder, and was probably due to gall stones, as jaundice appeared on the following day.

Parotitis is not uncommon in the acute infections with which purpura is associated, such as malignant endocarditis and pneumonia. In such a case as that described under renal symptoms, in which the purpura was a terminal event in a chronic interstitial nephritis, the accompanying parotitis was of the same nature; sepsis was present. But in the following case, under the care of Dr. C. J. Wood, the parotitis occurred in one of these remarkable instances of acute febrile erythema with purpura, in which the patient had half a dozen relapses of great severity.

J. C., aged 22, a medical student with good family history, was strong and well until the present illness. On November 1st he had a chill, with headache, vomiting, and the temperature rose to 105°. On the second day an eruption appeared all over the body, purplish-red in colour, which lasted for two days. The temperature persisted, with much fever and headache; on the fifth day the right parotid gland became swollen and tender. The symptoms gradually disappeared, and the parotid subsided, and at the end of ten days he was quite well. As mumps were about, it was thought possible to be an anomalous case. He went back to his studies for three days; then with chilliness and headache a second attack came on; the temperature rose to 105°, and on the second day a rash appeared—raised spots, 1 cm. in diameter, some looking like ordinary hives, others of a deep purple colour. With this attack there was nausea and vomiting, but no abdominal pain. At the end of

three days he felt quite well. He had in all six or eight of these attacks. In one there was an outbreak of ordinary purpura on the hands and feet. In the third and fourth attacks the knees, ankles, and shoulders were slightly swollen and tender; the superficial lymph glands became enlarged, but not the spleen. In one attack there was a slight conjunctival haemorrhage; the bowels were constipated, but considering the severity of the attacks the general health was not much disturbed. There was no anaemia; there was always a slight leucocytosis. The attacks gradually wore away and the young man recovered.

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ORAL SEPSIS SIMULATING HENOC'S PURPURA.

By T. S. BRADBURN, M.R.C.S., D.P.H.

A GROOM, aged 28, was first seen by me on February 3rd, 1913. His previous health had been always good, and his family history was good also.

At the end of an ordinary day's work in the stable, just before Christmas, 1912, he was suddenly seized by a shivering fit, had pains in all his joints, and a general feeling of malaise. He passed a restless night, and the next morning noticed that his legs were covered with blotches. He stayed in bed for a fortnight and got a little better; but, on getting up at the end of this time, he caught, in his own words, another cold, and the joint pains, which had never quite gone, returned with increased severity, and he again broke out in blotches over the legs and lower part of the stomach. In addition, he now had pains in the abdomen, severe, spasmodic, not related to food, and, while intermittent, never absent for many minutes. He remained in this condition up to the date when I first saw him—approximately six weeks from the commencement of his illness.

He was a well-developed, muscular man, rather flushed, and looking ill. He was quite rational and answered intelligently, but every few minutes he would roll about in bed groaning from abdominal pain.

His pulse was 90, large, soft, and regular; the temperature was 99.2° F., and he was sweating slightly; the tongue was clean. There were no physical signs in the chest; the abdomen was slightly distended uniformly, but nowhere tender, and he suffered deep palpation all over without flinching. Pain was not elicited in the right iliac fossa, and there was no superficial skin tenderness anywhere. There was no visible peristalsis and no sign of fluid. The bowels had moved that morning. There was neither swelling nor tenderness of any of the joints. Over the lower part of the abdomen, on the thighs, legs, and small of the back were scattered purpuric spots, not raised, not fading on pressure, and varying in colour from brown to red.

I was quite at a loss for a diagnosis, and as the man was evidently in great pain, chiefly abdominal, I advised that he should be taken at once to the hospital. He was admitted accordingly to the Wolverhampton General Hospital under Dr. Malet, to whom I am indebted for permission to publish the case. To Dr. Rattrie, the resident medical officer, I am under much obligation for the use of the notes he took while the patient was under his care.

At the hospital it was found that there was blood in the patient's motions and also in the urine.

Widal's test being negative, he was given calcium lactate, gr. x t.d.s., and a provisional diagnosis of Henoch's purpura was made.

As there was no improvement at the end of a week, his blood was sent to the Clinical Research Society to be tested against the paratyphoid group of organisms. The report, dated February 11th, 1913, was:

The serum agglutinates paratyphoid B in 1 in 10, 1 in 25, 1 in 50, partial with 1 in 100, but none with 1 in 200. Negative to paratyphoid A. No reaction is obtained in controls of either organism made with normal serum.

The dose of calcium lactate was doubled, still without benefit. At the end of a fortnight his condition was very much as on admission, though the spasmodic attacks of abdominal pain were rather less frequent. The purpura continued to break out over his body, fading in one place and appearing in another, and there was still blood in the faeces and urine. The temperature from February 16th till just before his discharge is shown in the chart.

It was my custom to visit him about once a week, and on February 27th Dr. Rattrie and I again examined the

patient carefully. Our opinion was that sepsis somewhere was keeping up the condition, and on looking into his mouth we found it full of septic and carious stumps.

A = Anaesthetic. Teeth extracted.

On March 1st, under an anaesthetic, all the decayed teeth were removed. The result on the temperature is seen in the chart. From that day all his symptoms disappeared, and he left the hospital practically well. In a few weeks he was back at work, and he has remained well since.

FURTHER NOTE UPON A CASE OF HYSTERICAL MONOPLEGIA FOLLOWING ELECTRIC SHOCK.

By PURVES STEWART, M.D., F.R.C.P.,
PHYSICIAN TO WESTMINSTER HOSPITAL.

THIS case was recorded in a previous number of the BRITISH MEDICAL JOURNAL (December 20th, 1913, p. 1580). It is unnecessary to repeat the history in detail. Briefly, the patient, a young man of 21, after an electric shock to the left hand, developed sudden paralysis of the left upper limb, at first spastic in type, later with complete flaccidity and with total anaesthesia of the limb to all forms of stimuli up to the level of the shoulder-joint (see Fig. 1). It will be remembered that pins could be thrust through the anaesthetic skin without causing bleeding. Nevertheless, the skin of the limb showed normal reaction to a fly-blister; also it sweated normally after pilocarpin administered hypodermically.

Nine months after the accident he was admitted to Westminster Hospital, where, for a further period of over two and a half months various forms of suggestive treatment were tried, including strong electrical stimulation to the paralysed limb, the application of cutaneous irritants—such as *Mucuna pruriens*—to the anaesthetic area of the skin, and so on. Despite these measures, however, the clinical phenomena remained at a standstill, and we therefore decided to send the patient for suggestive treatment to a medical colleague who was

a skilled hypnotist of high reputation. For over two months repeated and assiduous attempts at curative suggestion were made at the psycho-therapeutic clinic, but without producing the slightest effect upon the patient's symptoms. In fact, if anything, he became worse, inasmuch as the limit of cutaneous anaesthesia and analgesia advanced in a proximal direction on to the trunk, so as to include the outer part of the pectoral region in front and a similar area over the scapula behind. By the end of January, 1914, the medical hypnotist wrote that neither he nor his assistant could do anything more for the patient.

Fig. 1.—Hysterical monoplegia of left upper limb. Photograph taken when symptoms had lasted nine months. The black line indicates the upper limit of the anaesthesia. The patient is attempting to elevate both shoulders.

Fig. 2.—Hysterical monoplegia of left upper limb of eleven months' duration. The same patient after the administration of a general anaesthetic. The anaesthesia has completely disappeared, and the motor functions are normal.

Accordingly, the patient having been over two and a half months in hospital, and the paralysis having now lasted eleven months from the time of the original electric shock, we decided, before discharging the patient, to try the effect of giving him a general anaesthetic, in the hope of loosening his obsession during the stage of delirium produced by the inhalation of ether freely mixed with air. This was accordingly done on January 20th. The patient was placed on a couch with chest and arms exposed. He was then given ether and nitrous oxide, with plenty of air,

so as to prolong the stage of excitement. The normal right arm was fixed to the trunk by a bandage; the paralysed left arm was allowed to hang free. Within a few seconds, whilst the anaesthetic was being administered, and without any suggestion on the part of the physician, the patient began to make slight movements of the paralysed arm, and in a short time these amounted to violent fighting movements, in which the patient tried to snatch the mask out of the hands of the anaesthetist. After a