this purpose. The enthusiasm of patients themselves, many of whom have over the years received numerous types of treatment, has been a noteworthy feature during this study.

In passing, it should be mentioned that this dressing has also been used with equally satisfactory results for the granulating wounds following excision of pilonidal sinuses and after drainage of abscesses and septic wounds. Here, too, patients who have suffered unfortunate experiences with paraffin gauze were particularly impressed with the painless and bloodless removal of this dressing.

ILLUSTRATIVE CASES

A woman aged 64 attended on November 28, 1956, with an ulcer 3 by 2 in. (7.5 by 5 cm.) above the medial malleolus and with two small satellite ulcers. The edges of the ulcers, which had been present for five years, were callous and the leg and foot were oedematous. All ulcers were healed soundly by February 6, 1957.

A man aged 50 attended on September 12, 1956, with an ulcer on his leg 5 by 4 in. (12.5 by 10 cm.) and approximately $\frac{1}{2}$ in. (1.3 cm.) deep. His hip was ankylosed following a war wound and he had restricted movement at the knee. The leg was grossly oedematous. The ulcer was soundly healed and the leg clear of oedema by February 13, 1957.

I am greatly indebted to Professor C. G. Rob and Mr. R. M. Handfield-Jones for permission to treat their patients and to Messrs. Johnson and Johnson (Gt. Britain) Ltd. for the supplies of "N-A" (non-adhering) dressing and porous elastic adhesive bandages.

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Three Successive Attacks of Subacute Bacterial Endocarditis Due to Different Organisms

Reynolds, Lev, and Weinshel in 1951 reported a case of subacute bacterial endocarditis with recovery from a re-infection contracted 32 months after the initial episode. They found seven further cases in the literature up to that time. In some of these patients the second attack was caused by a different organism from the one responsible for the original infection. Wallach and Pomerantz in 1951, and Stockard in 1952, each reported a case with two successive attacks due to different organisms.

The following is the case report of a patient who had three successive attacks of subacute bacterial endocarditis, each attack being caused by a different organism. The initial infection was due to *Staphylococcus aureus*, and was treated with penicillin and chlortetracycline. The second attack, which occurred 15 months later, was caused by *Streptococcus viridans*, and was cured with penicillin and streptomycin. *Str. faecalis* was the organism responsible for the third episode, which occurred after a further time-interval of 40 months. This was successfully treated with erythromycin. Friedberg (1950) mentioned a similar case with successive infections due to *Staph. aureus*, micro-aerophilic streptococcus, and *Str. viridans*, but no other reference could be found in the literature.

CASE REPORT

The patient, then a man aged 23, was admitted to hospital on February 17, 1951, with a history of frontal headaches and vomiting for one week, and weakness of the left arm and leg for three days. There was a past history of rheumatic fever at 8 years and again at 14 years.

On examination his temperature was 103° F. (39.4° C.), pulse 120 a minute, regular rhythm. He was irritable and had photophobia, signs of meningeal irritation, weakness of the left arm and leg, splenomegaly, and petechiae over the hands, trunk, and legs. The heart was slightly enlarged and there was a long harsh apical systolic murmur due to mitral incompetence. The teeth and gums were healthy and

there were no skin abrasions or sepsis. The W.B.C. was 13,600 per c.mm., granulocytes 62%; and the C.S.F. turbid, culture sterile. Blood culture on February 17 showed contamination and on February 23 was sterile.

A provisional diagnosis of subacute bacterial endocarditis with a cerebral embolus producing a meningeal reaction and left hemiparesis, was made on admission; treatment with intramuscular soluble penicillin, 250,000 units three-hourly, and intrathecal penicillin, 15,000 units daily, was instituted at once. Intrathecal penicillin was given for four consecutive days and intramuscular penicillin was continued for 16 days. Response to this therapy was poor, and it was replaced by streptomycin, 0.5 g. thrice daily for 30 days. His general condition improved, and on discharge on March 30 he had little residual weakness of his left arm and leg.

He was readmitted on April 30, 1951, with a high fever—temperature 104° F. (40° C.)—fresh petechiae, and an enlarged spleen. Blood culture on two successive occasions revealed a pure growth of *Staph. aureus*. (Organisms isolated by Mr. G. H. Turner.) He was treated with soluble penicillin intramuscularly, 1,000,000 units six-hourly for 78 days. On May 10 he developed a popliteal embolus in the right leg, which subsequently necessitated a below-knee amputation. At this stage he began to deteriorate, and a course of chlortetracycline, 500 mg. six-hourly, was given for 35 days. He responded to this and returned home on August 20.

He remained in good health for 15 months, but was readmitted to hospital on January 10, 1953, with a nine-weeks history of generalized aching pains, swelling of the left ankle, and loss of weight. Physical examination showed slight sacral oedema, Osler's nodes in the fingers, and splenic enlargement. Blood culture revealed a pure growth of *Str. viridans* sensitive to penicillin and streptomycin. (Organism isolated by Dr. R. A. Holman.) Treatment with soluble penicillin, 500,000 units four-hourly intramuscularly for 42 days, and streptomycin, 1 g. daily for 12 days, was given, and he was discharged on February 21.

He was readmitted on July 11, 1956, with a history of swelling of the left ankle for three weeks and a throbbing frontal headache for three days. On examination his temperature was 100° F. (37.8° C.), his pulse was 104 a minute and showed auricular fibrillation, and there was slight sacral oedema and splenomegaly. The urine contained red and white blood cells, but was sterile on culture. By this time he had developed widespread dental caries and pyorrhoea. A blood culture revealed a pure growth of *Str. faecalis* sensitive to erythromycin only. (Organism isolated by Dr. G. M. Williamson.)

Treatment with erythromycin, 300 mg. orally eight-hourly, was started, and was continued for 32 days. The pyrexia subsided by the fifth day of treatment and did not recur. A blood culture taken 34 days after erythromycin treatment had been stopped was sterile.

However, the mild degree of congestive cardiac failure which was present on admission never cleared. It remained constant for six weeks and then became progressively worse in spite of treatment with digitalis, diuretics, and salt restriction. On September 29 he developed a pulmonary infarct, and two days later he died. No necropsy was carried out.

My thanks are due to Dr. J. R. H. Towers and Dr. R. N. Tattersall for permission to publish this case, and to the latter for his help and advice. I am grateful to Mr. G. H. Turner, Dr. R. A. Holman, and Dr. G. M. Williamson for their help in carrying out the bacteriological investigations.

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