An important innovation had been made to make the ambulance worker an integral part of the team and when he realized this he emerged as a surprisingly enthusiastic and capable member of the emergency department staff. Regular lectures and demonstrations were given to ambulance crews and particular emphasis was placed on the importance of maintaining the airway. In one series of 182 patients who died as a result of road accidents, no less than 36% of those dead on arrival had aspirated blood, mucus, or gastric contents into the respiratory passages. As a result the ambulance worker was fully prepared to answer questions on state of consciousness, position of patient, or the amount of bleeding when he arrived at the hospital.

He said that for many years local ambulances had been provided with simple suction and resuscitation equipment, but the most successful innovation had been the provision of radio communication between the ambulance crews and the hospital doctor. This experiment had started six years ago and had amply proved its worth.

THE FIGHT AGAINST FUSIFORMIS

M. J. BETTY (Newcastle) discussed the problem of treating cerebral abscess due to anaerobic organisms of the fusiformis group (bacteroides). He noted that these were difficult to culture and often occurred in association with other anaerobic and with aerobic organisms. He stated that these organisms were strict anaerobes, Gram-negative and non-sporing. Of the four species recognized, *F. fragilis* had been most commonly found and this was invariably resistant to penicillin.

He then described in detail four patients who had cerebral abscesses due to this organism. Three were associated with middle ear infection and the fourth with cyanotic congenital heart disease. The main problem had been due to delay in diagnosis and infection by an organism which was both difficult to culture and to eradicate. The fusiformis organisms most commonly isolated were resistant to penicillin and the most useful drugs were erythromycin and chloromycetin. Erythromycin in high dosage and over long periods would achieve bactericidal levels and eradicate the infection. The organisms were also sensitive to lincomycin which might prove of value.

He stressed that the important factor in treatment was high dosage, preferably intravenous, of erythromycin or chloromycetin continued over a period of several weeks. This therapy should be started immediately if an initial smear showed Gram-negative bacilli of the fusiformis type. The associated anaerobic bacilli were almost invariably penicillin sensitive.

THE USE OF DEXAMETHASONE IN THE CONTROL OF CEREBRAL OEDEMA

JOHN P. WISSINGER (Minneapolis), LYLE A. FRENCH (Minneapolis), and F. JOHN GILLINGHAM (Edinburgh) presented their experience with the use of steroids for the control of cerebral oedema using material from the

University of Minnesota and the Department of Surgical Neurology in Edinburgh. Signs and symptoms of increased intracranial pressure showed striking remission after the administration of the potent glucocorticoid, dexamethasone (Decadron).

Initial dosage of dexamethasone recommended by the authors was 10 mg. intravenously followed by 4 mg. intramuscularly every six hours. This high dosage was maintained until a maximum response was achieved which was usually in a period of three to four days, then the dosage was decreased gradually over a period of five to seven days.

In 249 patients with brain tumour, 212 showed signs of greatly increased intracranial pressure, 31 were comatose. Two hundred and two of the 249 cases showed improvement after treatment with dexamethasone. Evidence of improvement was the prompt and continued relief for the duration of treatment of signs and symptoms of increased intracranial pressure and/or alleviation of neurological deficits. The onset of response was almost invariably within 12 to 18 hours after beginning therapy and maximum neurological improvement was usually obtained within four days. Fifty-eight patients with operative and postoperative oedema were treated. Seven patients were comatose. In 12 to 24 hours after starting dexamethasone, 43 patients showed striking improvement. Three moribund patients failed to respond.

Sixty-three patients with closed head trauma, comatose for 24 hours or more, were treated with dexamethasone. Thirty-five were awake and orientated 24 hours after therapy was started.

Forty out of 46 patients with subarachnoid haemorrhage and signs of increased intracranial pressure showed symptomatic improvement after treatment with dexamethasone. Eight patients developed signs of increased intracranial pressure after beginning x-ray therapy. After treatment with dexamethasone all showed relief of nausea, vomiting, and headache within 24 hours. In six cases of intracerebral haematoma none showed improvement with dexamethasone. Two out of three patients with pseudo-tumour cerebri showed improvement with dexamethasone therapy. Complications with the use of dexamethasone in 433 cases were rare. Gastrointestinal ulceration and bleeding occurred in four, activation of preexisting duodenal ulcer in one, psychotic disturbances in five, impaired wound healing in seven, masking of postoperative clot in three, salt and water retention in two, salt-losing syndrome in one, severe oedema after the discontinuance of therapy in three.

The authors showed electron microscopic studies of oedematous brain before and after the use of dexamethasone. There was marked diminution in swelling of the astrocytes and the ultrastructure of the white matter had returned to near normal with disappearance of the greatly expanded extracellular space.

DERMOID TUMOURS OF THE SPINAL CORD

IAN BAILEY (London) discussed spinal dermoids and their associated tumours and classified them on the basis of number of germ layers represented. He stated that the