A PROBLEM OF PROLONGED ORAL INTUBATION: CASE REPORT

D. H. ADAMSON, M.B.CH.B., F.R.C.P.(C)

A SIXTY-FOUR YEAR old man, in borderline hypoxia and respiratory failure, became confused in our intensive care unit. His attending physicians were unsure whether this confusion was due to hypoxia or withdrawal from alcohol. His blood gases showed P_{O_2} 65, P_{CO_2} 110, pH 7.36. He was grossly disoriented, completely unmanageable, and had pulled out all tubes (nasal catheter, IV etc.). Since he weighed over 200 lbs and was approximately 6 ft tall it was difficult to approach him.

To sedate him sufficiently to subdue him would obviously worsen his respiratory failure and probably kill him, unless he was also ventilated, so it was decided

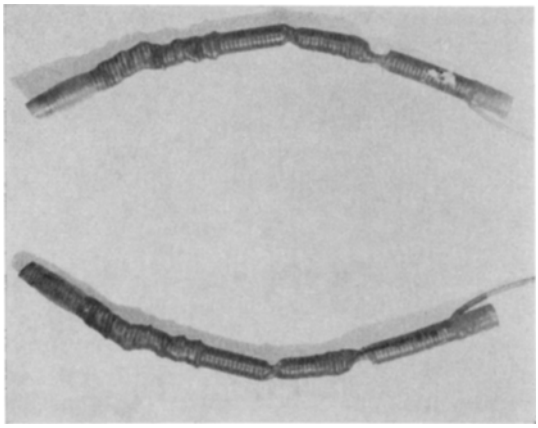

FIGURE 1

to sedate him, intubate him and ventilate him, and then to observe the effects of better oxygenation as his sedation wore off. Accordingly he was given 20 mgs diazepam (Valium) and 40 mgs succinylcholine both intravenously, ventilated with an ambu bag and attempts were made to pass a naso-tracheal tube. An anatomical abnormality of his nasopharynx made these attempts unsuccessful. Therefore, after further succinylcholine, a non-kinkable endotracheal tube with a metal spiral embedded in the rubber was passed orally. The patient was suctioned and ventilated well for about 30 minutes. At this time when being suctioned again he awoke and became violent. It had been hoped that being well ventilated and well oxygenated he would be co-operative and would tolerate the endotracheal tube, and also that the tube would be strong enough to withstand some chewing. Both of these hopes proved false. The patient bit through the tube, including the wire spiral, with his incisors and canines and compressed it closed in another area with his molars.

The cuff was deflated so that he could breathe around the tube and after another 20 mg Valium, to relax his bite on the tube and to quieten him, the tube was removed. Following further attempts a pliable No. 7 Portex naso-tracheal tube was inserted with great difficulty.

After three days of sedation and good ventilation the patient's withdrawal symptoms subsided and he became well oriented.

This case report demonstrates that the per-nasal route is preferable for prolonged intubation of the awake confused patient and if the oral route must be used in such patients, some type of bite block is essential.

A photograph of the mutilated armoured tube is shown (Figure 1).