RESPIRATORY OBSTRUCTION DUE TO IMPACTION OF THE EPIGLOTTIS IN AN ADULT

Sir,—The article by Dr. Thomas on the above topic (Br. J. Anaesth. (1964), 36, 314) prompts me to describe an interesting case I had some time ago.

A male patient in his fifties was anaesthetized with thiopentone and paralyzed with suxamethonium. Laryngoscopy was performed using a Macintosh laryngoscope and a large broad epiglottis was visualized. When slight pressure was transmitted to the vallecula in an inferior direction, the epiglottis bent over completely and became impacted in the glottis. When the pressure was released the epiglottis remained impacted but disimpaction was easily effected by exerting, in the vallecula, very slight pressure in an anterior direction. These manoeuvres were repeated with the same results. Intubation was carried out quite easily using the Macintosh laryngoscope. Following extubation at the end of the operation the patient was nursed on his side. No airway difficulties were encountered.

With regard to the literature relating to respiratory obstruction due to impaction of the epiglottis: there have been several articles published in addition to the four mentioned by Prof. Macintosh (Br. J. Anaesth. (1964), 36, 464). These include a leading article in the British Medical Journal of 1942 which discussed the complication in details. More recently an article was published in Anaesthesia (Pokrzywnicki, 1953) describing a case where impaction of the epiglottis occurred in an adult patient who was under ether anaesthesia—ventilatory difficulties became apparent and the patient developed slight signs of cyanosis—"a strange unusual sound was heard from beneath the face mask, sometime a flapping or clapping sound occurring during inspiration... Assisted respiration by pressure on the breathing bag was unsuccessful (in relieving the obstruction)... laryngoscopy was performed... it was observed that the epiglottis, which was thin and longer than usual, was sucked between the cords during inspiration." This was probably the first time that impaction of the epiglottis had actually been visualized.

Original observation of impaction of the epiglottis is attributed to Col. F. J. Palmer who, whilst serving in the I.M.S., observed such a case as long ago, apparently, as 1908. Later experience confirmed his observation and he read a paper before the Assam branch of the B.M.A., this paper being published in the Indian Medical Gazette, in 1928.

With regard to references in the standard textbooks, Lee (1959) devotes a paragraph to impaction of the epiglottis as a cause of airway obstruction. Dr. Thomas states that impaction of the epiglottis is said to happen rarely in neonates following attempted intubation. It would appear that impaction can also occur in the neonate unassociated with any obvious precipitating cause; Mr. F. Boyes Korkis (personal communication, 1964) has described three cases of airway obstruction in apparently normal neonates, where, at laryngoscopy, impaction of the epiglottis was seen.

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REFERENCES
Palmer, F. J. (1928). Chloroform administration and the dangers and the role of the epiglottis in anaesthetic collapse, Indian Medical Gazette, April, 194.

HAZARD OF INTERCHANGEABLE CYLINDERS

Sir,—A British Oxygen Company Centanaest anaesthetic machine which has not been converted to pin index cylinder fittings, at which present accepts interchangeable nitrous oxide and oxygen cylinders, has hitherto been used connected to the hospital pipeline (60 p.s.i.) and has been considered absolutely safe. On being used recently, however, it was observed that the cylinders having been turned on by some helpful but misguided person, oxygen was being consumed from the cylinders although the machine was connected to the pipeline. This machine has reducing valves from the cylinders and from the pipeline with approximately identical outlet pressures and inequality in these final outlet pressures (well within normal tolerance for those reducing valves) will permit gas from a cylinder in the oxygen position to be used in preference to gas from a normally connected oxygen cylinder. This is a grave danger and the role of the epiglottis in anaesthetic collapse, Indian Medical Gazette, April, 194.

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