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SUBCUTANEOUS EMPHYSEMA FOLLOWING TONSILLECTOMY

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SUBCUTANEOUS emphysema following tonsillectomy is not quite such a rare complication as J. A. Keen suggested recently in this Journal (1), nor is it necessary to accept the statements of Professor Marschik (2) and others, quoted by Keen, that interstitial and subcutaneous emphysema is always of alveolar origin. The following case is one which occurred within my own experience:

G.Y., a stout, bull-necked young man (he had played forward in an international trial XV) aged 25, had his tonsils dissected out by me on July 31st, 1928. At the end of the operation, which was quite straightforward, my anaesthetist, Dr. C. W. Morris, suggested that, as the patient was a little cyanosed, he should give him some oxygen. Accordingly, oxygen was given through a bent tube, blowing on to the palate, for about a minute, when his colour had become normal. He was removed to bed, and I did not see him again until six hours later, when he was quite comfortable, except that he complained of constant bubbles in his saliva. I examined his throat, and found that his tonsil beds were quite dry, but his uvula was much swollen; I could see also that there were a lot of air (or rather oxygen) bubbles in his saliva. Touching his face I noticed a crackling sensation, and then, on more careful examination, I found that subcutaneous emphysema was present from his forehead right down to his clavicles, his eyes, cheeks and neck being most swollen. There was, however, no laryngeal oedema, nor was his throat or mouth abnormally swollen. The patient, himself, complained of nothing except the bubbling in his saliva. Convalescence proceeded without further complications, but the emphysema did not disappear for five days, the forehead being the last to clear. I made enquiries at the time about how long oxygen took to disappear when injected into the tissues and I was told that it was within twenty-four to forty-eight hours; but, in this case, the tissues were certainly not normal before the fifth day.

The complication is not a serious one, and I did not report the case at the time, partly for that reason and partly because it was apparently not uncommon, as Irwin Moore's book (3) published in that year, mentioned, without comment, two cases of surgical emphysema following tonsillectomy, reported respectively by C. W. Richardson (4) and by B. D. Parish (5). J. A. Keen has overlooked this, for he says that he had thought that his own case (1922) was a unique one, until he found three cases described by F. H. von Hofe (6) in America in 1930; von Hofe's cases were of slight emphysema, occurring during the guillotine operation under general anaesthesia, ether being blown into the mouth. Other cases have
Clinical Records

also been reported by L. G. Richards (7), Rosenheim (8), and S. Stein (9). The complication is not mentioned in the monographs, dealing with the tonsils and tonsillectomy, of Barnes, Sluder, or Fowler, nor in the latest editions of the standard textbooks of diseases of the nose and throat of St Clair Thomson, Logan Turner, Herbert Tilley, Dan McKenzie, Chevalier Jackson and Coates, Ballenger, Coakley, Wendell Phillips, Mouré, Liebault and Canuyt, or Laurens.

There seems not the slightest doubt that, in my case (and also in von Hofe's cases), the point of entry of the oxygen or air, which was under pressure, was through the muscle fibres of the empty tonsil beds. In 1908 a case was reported by A. S. Woodwark (10) of surgical emphysema of the head and neck following the breaking of a pipe stem and perforation of a piece just above the anterior pillar of the fauces on one side; in this case the point of entry was undoubtedly in the fauces and the emphysema was not of alveolar origin. In this Journal in 1928, G. Ewart Martin (11) and E. A. Dalziel Dickson (12) each reported a case of surgical emphysema of the face, due to severe blowing of the nose, the point of entry being apparently some small rift in the nasal mucosa. So that Keen's opinion, following that of Professor Marschik, that subcutaneous emphysema is invariably of alveolar origin, is not conclusive, though his own case was, I feel sure, of alveolar origin.

REFERENCES

5 Parish, B. D., Laryngoscope, 1910, xx., 1046.
9 Stein, S., Laryngoscope, October, 1923, xxxiii., 785.

261