"BLUE DRUM," OR IDIOPATHIC HAEMOTYMPANUM, IN CHILDREN

BY

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Shambaugh (1929) has given a detailed description of a condition which he has named "blue drum," and of which he reports two cases occurring in adults. Fowler (1939) also quotes a case, but the age of the patient is not specified.

In appearance the tympanic membrane is blackish blue over the whole of the pars tensa, which is retracted. The pars flaccida does not share in the discoloration. The landmarks of the drum stand out clearly, and the condition is not associated with any myringitis or bulla formation.

Deafness of the conductive type is present. Two instances of "blue drum" have been encountered recently in children, and a summary of the histories may be of some interest.

Two Case Records

Case 1.—This patient, a girl aged 7, had a history of intermittent deafness associated with colds, occasional earache, but no otorrhoea. During the fortnight preceding examination the deafness had become much worse, although there were no local or general signs of an inflammatory condition. Slight tinnitus was complained of. Examination of the right ear showed that the tympanic membrane had an intense blackish-blue appearance, as described above. The landmarks were readily visible, and there was no bulging. Rinne's test was negative for the C to c' forks, and Weber's test showed lateralization to the right. Inflation by catheter revealed some Eustachian tube obstruction, and rales were heard through the auscultation tube. The drum assumed its normal position after inflation, and the colour changed to a dull grey, with brownish patches. (Shambaugh's cases showed no change in colour after politizerization.) The hearing for the whisper improved from 6 inches to 10 feet, normal audibility being 20 feet. The left ear had a retracted membrane, with a little fluid exudate of a clear character in the lower part of the tympanum. There was a conductive deafness of a less degree than that of the right ear, the whisper being heard at 2 feet before inflation and 12 feet after. The tonsils showed some evidence of infection, and there was a moderate adenoid pad.

After an interval of a few days the right drum was in its initial state of "black-blueness," although the hearing had become a little better (whisper, 2 feet). Subsequent inflations by Politzer's method over a period of some weeks resulted in an improvement of the hearing to 10 feet for the whisper, at which standard the hearing acuity remained stationary. The drum always reverted to its previous blue appearance in the intervals. This is in line with Shambaugh's experience of recurrence, although in his cases inflation was preceded by myringotomy.

Removal of the tonsils and adenoids was then carried out, and fourteen days afterwards both drums were normal in appearance and the whisper was audible at 20 feet in each ear. The condition has not recurred in the several months which have elapsed since the operation.

Case 2.—A boy aged 10 was referred for the removal of tonsils and adenoids. Some slight deafness had been noticed

at home. Examination of the right ear showed a typical blue drum, with a fairly high degree of conductive deafness (whisper, 2 feet). The left drum was a little dull and retracted, and the hearing for the whisper was 10 feet. Fourteen days after the removal of the tonsils and adenoids the blueness was found to be confined to the anterior half of the drum and the whisper was audible in the affected ear at 16 feet. One month after the operation the drum was normal, as was the hearing to voice and tuning-fork tests.

Commentary

Shambaugh's cases occurred in individuals over 50 years old. The treatment consisted of myringotomy, followed by inflation, which expelled a chocolate-coloured fluid. The period of relief was only temporary, and recurrence followed. Fowler's case had an effusion into the maxillary antrum on the side of the ear lesion, but the subsequent course of the case is not mentioned.

It would appear that the condition is the result of a "hyperaemia ex vacuo," consequent on Eustachian tube obstruction. The reported cases recovered readily and completely after the removal of the primary cause of the Eustachian block.

REFERENCES

- Fowler, E. P., jun. (1939). In Nelson's *Loose-Leaf Medicine of the Ear*, p. 169.
Shambaugh, G. E. (1929). *Arch. Otolaryng.*, 10, 238.

Medical Memoranda

Lung Collapse after Eye Operation under Local Anaesthesia

It is thought worth while recording this case, as a search of the literature failed to reveal a similar one. It is well known that collapse of the lung, both massive and partial, follows all types of surgery, occurring in about 0.3% of all operations, and that various reasons have been assigned for this. It seems certain, however, that it is not entirely due to the irritant effect of inhalation anaesthesia, causing a mucous secretion which, by becoming inspissated, finally blocks a bronchus. There are still many cases of this complication following operations with regional block local anaesthesia, although they are only about one-tenth as frequent. This compares favourably with spinal anaesthesia, in which, as regards abdominal cases at least, collapse is as common as with inhalation. In the following case the only explanation as to causation that can be suggested is that patients with glaucoma are nursed upright after operation and instructed at all costs to avoid coughing. This would tend to allow any mucus to gravitate towards the lower lobes and to accumulate there.

CASE REPORT

A spinster aged 65 was trephined by Mr. Tait of Windsor for a chronic glaucoma on December 23, the anaesthetic being a simple instillation of a few drops of 1% pantocain into the right eye. The local and general condition made satisfactory progress until January 1, when there was a sudden onset of dyspnoea, with pain in the right lower chest. I was asked to see her, and found signs suggestive of partial collapse of the right middle and lower lobes. Although there were no constitutional disturbances suggestive of lobar pneumonia she was given a short course of sulphapyridine, 7 grammes in all. Within a further twenty-four hours there was a complete collapse of the two lobes, as shown by the absence of the respiratory murmur, and a temperature of 100.2°. Postural drainage and bronchoscopy were both contraindicated by reason of her eye condition, so inhalation of carbon dioxide was tried, and although after one period of hyperpnoea crepitations were heard over the affected area the condition remained quite stationary.

By January 6 the patient was feeling fit enough to travel by car to spend a few days in a convalescent home. A radiograph taken on January 7 showed the typical appearance of collapse. She then rested a fortnight, with some pain at the right base for the first few days and with some dyspnoea on exertion. During this time large doses of ammonium carbonate were given