

the brachial plexus. Without taking into consideration the possible results of pressure upon all of these, we know with certainty that there may be grave pressure upon the trachea leading to dyspnoea and other respiratory disturbances; this pressure is generally lateral, but may be also from in front.

Even relatively small goitrous enlargements, if projecting backwards, may cause severe dyspnoea, and apart from mere dyspnoea, we frequently find distinct alteration in the voice, a rawness and want of tone. This may in part be due to compression upon the trachea, but Wölfler found more or less paralysis of the vocal cords in 10 per cent. of the cases he examined; Krönlein out of 191 subjects found 62 having a history of paroxysmal dyspnoea and 49 showing a definite disturbance of the voice; 7 of these 49, whom alone he was able to examine laryngoscopically, showed unilateral paralysis of the cords. Such paralysis is evidently due to direct pressure upon the recurrent laryngeal.

Pain behind the ear, which not infrequently occurs, has been ascribed to pressure upon the posterior auricular nerve; cramp in the neck muscles would seem to be due to pressure upon the accessorius; the compression of the large veins leads to congestion of the same and a certain amount of swelling of the neck and cyanosis of the face, while occasionally, though not as frequently as might be expected, there is a certain amount of dysphagia; where this is the case there is not infrequently enlargement of accessory lobes between the trachea and the œsophagus.

All these symptoms mentioned so far may with safety be ascribed to pressure and to pressure alone, but they far from exhaust the symptoms which may be noted. Frequently there are psychical disturbances. My own experience—and here I speak under correction—is that those having large and generalised goitres are in general dull, torpid, of low mental powers, not to say tending towards mental failure, and in addition they often show a rather special physiognomy, heavy, expressionless, and recalling strongly the appearances met with in those suffering from myxœdema. In this connection it may be called to mind that whereas sporadic cretinism is in general associated with atrophy and absence of the thyroid, where cretinism is endemic, over 50 per cent. of the cretins are goitrous—and cretinism is infantile myxœdema.

But, on the other hand, we have another series of cases in which the psychical disturbances, contrariwise, are those of mental irritation: at patients are highly nervous, sleepless, possessing a fear of impending trouble and unable to settle down to sustained work—symptoms, in short, closely resembling those found in exophthalmic goitre, and what is more interesting, when nodular goitrous masses are removed, as Dr. Shepherd\* has noted, the symptoms rapidly disappear. They seem, in

\* Vide his address in last month's number of this JOURNAL.