3. Swellings.

(a) Chronic swollen tonsil (unilateral or bilateral) without fever or constitutional symptoms represents usually the residual hypertrophy following many acute attacks of tonsillitis or may be part of the general adenoid hypertrophy so common in children's throats. Rarely it forms part of the leukæmic or pseudo-leukæmic process.

(b) Acute swollen tonsil is usually part of follicular tonsillitis (see above), but may occur without spots, and often accompanies scarlet fever. Swelling, pain in swallowing, and fever are the essentials

of diagnosis. Our chief care should be to exclude:

(c) Tonsillar abscess (quinsy sore throat). Here the swelling is usually unilateral and greater than in follicular tonsillitis. The pain, which is often severe, is continuous and not merely on swallowing. Fever, constitutional symptoms, and swelling of the glands at the angle of the jaw are all more marked than in follicular tonsillitis. The voice is nasal or suppressed, and there is often salivation. The pillars of the fauces and the soft palate take part in the swelling and the throat may be almost blocked by it. The suffering increases until the abscess breaks or is opened. Fluctuation is often late and indefinite, but should always be sought for.

(d) Retropharyngeal Abscess.—A swelling in the back of the pharynx near the vertebræ occurs not infrequently during the first year of life. A peculiar cry or cough, like the bark of a puppy or the call of a heron, is very often associated (the French "cri de canard"). The parents are often unaware that the throat is the seat of the trouble, and only digital examination proves the presence of bulging and fluctuation, usually on one side of the posterior pharyngeal wall.

A similar abscess of chronic course may complicate cervical

caries (see below, page 31).

(e) Swollen uvula, with transparent cedema of its tip, often complicates a pharyngitis or any lesion with violent cough. Elongation of the uvula may bring it into contact with the tongue and by tickling excite cough.

(f) Perforation of the soft palate or its adhesion to the back of the pharynx means syphilis almost invariably, and, as it may be the only sign of an old infection, it is a valuable piece of evidence.

4. Reflexes.

(a) Lively or exaggerated pharyngeal reflexes, such that the patient gags and coughs as soon as one touches the dorsum of the tongue, are seen in many nervous persons and in many alcoholics without nervousness. It is this condition, combined with a smoker's pharyngitis, that leads to many cases of morning vomiting in alcoholics.

(b) Diminished or absent reflexes (with paralysis of the palate) occur in postdiphtheritic neuritis and bulbar paralysis. Fluids are regurgitated through the nose and the voice has a peculiar intonation.

To test for paralysis, ask the patient to say "Ah." In unilateral paralysis one side of the palate remains motionless; in bilateral paralysis the whole palate is still.

THE NECK.

Long, thin necks are often seen in phthisical individuals, and short necks in the emphysematous, but nothing more than a bare hint can be derived from such facts. The lesions oftenest searched for in the neck are: 1. Enlarged glands (cervical adenitis). 2. Abscesses and scars. 3. Thyroid tumors. 4. Pulsations (see below, page 88). 5. Torticollis and other lesions simulating it. 6. Tuberculosis of the cervical vertebræ.

Rarer lesions will be mentioned below.

I. Chains of Enlarged Glands

radiate in all directions from the angle of the jaw—upward, in front of the ear and behind it, forward along the ramus of the jaw, and downward to the clavicle. The areas drained by the different groups overlap so much that it is not necessary to distinguish them.

THE NECK.

The commonest causes of enlargement are:

(a) Tonsillitis and other inflammations within or around the mouth (diphtheria, the exanthemata, "cankers," carious teeth, etc.). Glandular swellings due to these causes are usually acute and more or less tender; most of them disappear in a fortnight or less, but some persist (without pain) indefinitely.

(b) Tuberculosis; long-standing cervical adenitis in children and young adults, with a tendency to involve the skin and to suppurate, is usually due to this cause. Certain diagnosis depends on microscopic examination, animal inoculation, and the tuberculin

(c) Syphilis; small, non-suppurating glands, occurring in the neck and about the occiput in adults, often accompany syphilis, but the diagnosis depends on the presence of unmistakable syphilitic lesions elsewhere.

(d) Hodgkin's disease; chronic, large, rarely suppurating glands in the neck, axillæ, and groins, with slight splenic enlargement and normal blood, suggest Hodgkin's disease, but microscopic examination is necessary to exclude tuberculosis. A superficial gland can be excised under cocaine, with very little pain.

(e) Lymphatic Leukæmia. No distinguishing characteristics can be found in the glands, but any nodular enlargement in the neck should lead us to examine a film specimen of blood, and the leukæmic blood changes are easily and quickly recognized.

(f) Malignant disease (near by or at a distance) may enlarge the cervical glands. Cancer of the lip or tongue, sarcoma of the tonsil, and, among distant lesions, cancer of the stomach and sarcoma of the lung have caused enlargement of these glands in cases under my observation.

(g) If the parotid gland alone is swollen and there are fever and pain on chewing, the case is probably one of mumps, especially if there are other cases in the vicinity. Malignant disease may also attack the parotid.

(h) German measles may be accompanied by swelling of the posterior cervical or occipital glands without the involvement of any other.

II. Abscess or Scars.

Abscess or scars in the sides and front of the neck generally result from glandular tuberculosis; hence the presence of scars may be of value in the diagnosis of doubtful cases with a suspicion of

tuberculosis in later life. Aside from glandular abscesses (tuberculous or septic) it is rare to find any suppuration in the neck, except in the nape, where deep, septic abscess (carbuncle) and superficial boils are common. High Pott's disease may be complicated by abscess (see Fig. 18).

III. Thyroid Tumors

occur chiefly in two diseases:

- (a) Simple goitre (unilateral or bilateral).
- (b) Goitre with exophthalmos, tachycardia, and tremor (Graves' disease).

The tumor itself is identical in both these diseases (see Fig. 19); it varies in outline and consistency according to the amount of gland tissue and



Fig. 18.—Cervical Abscess in Pott's Disease.
(Bradford and Lovett.)

fibrous or cystic degeneration that is present. Owing to its connection with the larynx it moves up and down somewhat when the patient swallows, but is not attached to any other structures in the neck. The enlargement is often unilateral or largely so. If very vascular, the tumor may vary greatly in size from moment to moment or at certain times (i.e., menstruation, pregnancy).

Since the normal thyroid can rarely be felt, atrophy of the gland (as in myxædema) is unrecognizable.

Cancer or sarcoma have occurred in the thyroid and may be difficult to distinguish from goitre. Malignant tumors are usually



Fig. 19.—Simple Goitre.

painful, grow fast, are accompanied by emaciation and anæmia, are often harder and more nodulated than benign goitres, and invade the neighboring tissues and lymphatics. Histological examination should decide in doubtful cases.

IV. Torticollis (Wry-neck) and Other Lesions Resembling It.

(a) Spasm (tonic, rarely clonic) of the sterno-mastoid and trapezius may be

due to irritation of the spinal accessory nerve by swollen glands, abscess, sear, or tumor, but more often occurs without known cause ("rheumatic" and "nervous" cases). The muscle is rigid and tender.

- (b) Congenital torticollis (a counterpart of club-foot) is due to shortness of the muscle without spasm. It is almost always right-sided and associated with facial asymmetry.
- (c) Dislocation of the upper cervical vertebræ causes a distortion of the neck much like that of torticollis (see Fig. 20). The diagnosis depends on the



Fig. 20.—Dislocation of the Cervical Vertebræ. (Walton.)

history of injury, the absence of true muscular spasm, and the x-ray picture.

- (d) Compensatory cervical deviations: (1) When there is marked lateral curvature of the spine, with or without Pott's disease, the head may be inclined so far to the opposite side that torticollis is simulated (see below, page 71). (2) When the power of the two eyes is markedly different, as in some varieties of astigmatism, the head may be habitually canted to one side to assist vision. (3) In some cases due to none of the above causes, habit or occupation (heavy loads on one shoulder) seem to produce the condition.
- (e) Forced attitude from cerebellar disease may resemble torticollis. The diagnosis depends on the other evidences of intracranial disease.

V. Cervical Pott's Disease (Vertebral Tuberculosis)

has the characteristics alluded to below in the section on joint tuberculosis, viz., stiffness due to muscular spasm, malposition of the bones and of the head, and abscess formation (see page 31).

Diagnosis depends on wry-neck with stiffness of the muscles of the back and neck and pain in the occiput—a very characteristic symptom-group. The chin is often supported by the hand. "Rheumatic" or traumatic torticollis, however, may present all these symptoms, and diagnosis may be impossible without the aid of time and therapeutic tests.

VI. Branchial Cysts and Fistulæ.

These, due to persistence of parts of the fœtal branchial clefts, are not very uncommon (see Fig. 21).

A branchial cyst is a globular or ovoid fluctuating sac, hanging or projecting from the side of the neck or the region of the hyoid bone, painless and slow of growth. It may transmit the motions of the carotids and be mistaken for aneurism, but has no expansile pulsation and occurs in youth, when aneurism is practically unknown. Some such cysts may be emptied by external pressure.

¹A patient of mine can produce a gush of foul fluid in the mouth by pressure over a small cyst in the neck.

Branchial cysts may contain serous, mucous, or sero-sanguineous fluid, or hair and sebaceous material, according as their lining wall is derived from ectoderm or entoderm. Diagnosis depends on the position and consistency of the growth and on the results of aspiration.

Branchial fistulæ (congenital) may open externally in the neck, and occasionally are com-

plete from neck to pharynx. They may become occluded and suppuration result.

VII. Actinomycosis.

Actinomycosis, though



Fig. 21.—Branchial Cyst.

Actinomycosis, though it usually arises in the lower jaw bone, may appear externally in the neck. A dense infiltration with bluish-colored, semifluctuating areas in

it, but without any distinct lumps or sharp outlines, is strongly suggestive of actinomycosis, and should always lead to a microscopic examination of excised portions or of the discharge.

Fistulæ may form, but are less common than in tuberculosis.

VIII. A Cervical Rib,

springing from the seventh cervical vertebra and ending free or attached to the first thoracic rib, appears in the neck as an angular fulness which pulsates, owing to the presence of the subclavian artery on top of it. It rarely produces any symptoms and is generally encountered when percussing the apex of the lung. The bone can be felt behind the artery by careful palpation and demonstrated by radiography.

CHAPTER III.

THE ARMS AND HANDS; THE BACK.

THE ARMS.

Most of the lesions of these parts are *joint lesions* and are dealt with in the section on *joints*. Others fall under the province of the neurologist or the dermatologist, but must be briefly mentioned here.

I. Paralysis of One Arm.

Paralysis of most or all the muscles of one arm occurs oftenest in: (a) Hemiplegia—with paralysis of the leg and often of the face on the same side. (b) Pressure neuritis—traumatic or from new growths. (c) Obstetrical paralysis—neuritis from injury during parturition. (d) Lead or alcoholic neuritis—extensors of wrist especially, and often in both arms. (e) Anterior poliomyelitis—infantile paralysis. (f) Hysteria and traumatic neuroses.

Pressure Neuritis.—The history of the case is of the greatest importance. During surgical anæsthesia the brachial plexus or the musculo-spiral nerve may be compressed, and paralysis is noted as soon as the patient comes out of anæsthesia. In a similar way in deep sleep, especially drunken sleep with the arm hanging over a bench or doubled under the body, the nerves may be injured. Pressure from a crutch or from the head of the humerus in fractures or dislocations, or even a violent fall on the shoulder without injury of bones, may result in a paralyzed arm.

¹ Less common are paralyses due to lesions of the arm centre in the cerebral cortex (tumor, softening, cyst, abscess, hemorrhage, thromboses, or embolism).