REPORT OF OVER FOUR HUNDRED EAR, NOSE AND THROAT PATIENTS TREATED AT THE UNIVERSITY HOSPITAL IN MANILA.

BY HENRY WINSOR, M. D., PHILADELPHIA.

So little of the work done along these lines in Manila has been published, and the material is so unusual, that I have been asked to report the patients whom I treated in my clinic in St. Luke's Dispensary (connected with the University Hospital) in Manila during the year ending July 1, 1909. There were in all 416 such patients, of which 83 were aural, 223 were mouth, teeth or jaw cases (196 of the latter being dental), 50 were nasal, 10 pharyngeal, 10 palatine, 16 tonsillar, 20 laryngeal, and 4 were examples of accessory sinus disease. Few were admitted to the hospital because of the lack of room. The treatment had for the most part to be performed rapidly as there were many surgical dispensary cases waiting to be treated. Many of them, a summary of which is appended, had been neglected for months or years before coming to the hospital.

In one family there were two examples of accessory ear-cartilages. One child, aged six years, had five small accessory ear-cartilages arranged in front of, and superimposed upon the normal auricle of one side; also six such cartilages on the auricle of the opposite side. In the other child there were three small accessory cartilages near the right ear and one near the left ear. One of these patients was photographed by Dr. Bean, then Associate Professor of Anatomy in the Philippine Medical School. The cartilages were removed and the specimens are now in the University Hospital in Manila. They consisted mainly of cartilage covered with skin. One bore a slight resemblance to the foldings of a normal external ear.

Of the fifty-three cases of suppurative otitis media, five had aural polypi, which were removed. One child, aged five years, had suffered from a discharging ear for five months. When the aural polyp was removed, the posterior set of the superficial cervical glands were found to be enlarged, which, after removal, proved to be both necrotic and tubercular. This child recovered and the case is of special interest as it shows the local infective nature of glandular tuberculosis.

Two instances of occlusion of the anterior nares were observed. Both were in infants and followed ulceration from small-pox. The anterior nares were both completely closed by healthy skin. Cruciform incisions were made where the nares should open, the opening dilated with hemostats, and rubber drainage-tubes inserted, covered with vaseline. Although they were treated for several weeks, and the nares dilated from time to time, the tubes cleansed and re-inserted, the occlusion recurred again and again.

GANGOSA. There were several cases which were diagnosed as gangosa. This disease seems to be an affection peculiar to the Tropics. According to O. J. Minck and N. T. McLean, Past Assistant Surgeons of the U. S. Navy, and others* "Gangosa is the name employed by the Spaniards in the Ladrone and Caroline Islands, to describe a disease characterized by a destructive ulceration, usually beginning on the soft palate, pillars or uvula, and extending by continuity to the hard palate and nasal cavity, larynx and even to the face. Active ulceration is followed after a variable period by cicatrization or chronic ulceration. Mutilation always results. Constitutional symptoms are either slight or absent. Synonym is rhino-pharyngitis mutilans."

Of seven cases with oval apertures in the hard palate, so diagnosed, one presented no other signs of syphilis, tuberculosis, leprosy, or yaws, and may be accepted as a case of true gangosa. In the latter instance, the walls of the cleft in the hard palate were separated by an oval space with a transverse diameter of one inch, and a longitudinal extent of an inch and a quarter. The edges of the cleft were completely covered by healthy mucosa which was nowhere raw or unhealed; no granulation was observed; the posterior third of the septum was gone, and the inferior turbinated bones were plainly visible through the oval aperture in the roof of the mouth. The other six cases presented evidences of syphilis, such as Hutchinson's teeth, iritis, periostitis, rickets, or old ulcerations of the cartilaginous and bony septum, which conditions warranted a suspicion of syphilis and made the diagnosis of gangosa a doubtful and difficult one. However, none of these were active, none had granulating surfaces, and the disease had been arrested.

One woman about 35 years old, presented a loss of substance of most of the hard palate; the entire uvula was gone, most of the soft palate had disappeared, a large part of the vomer was absent

**Jour. A. M. A.*, Oct. 13, 1906; *Internat. Dermat.*, Vol. 2, 1903, (Minck), p. 571; *U. S. N. Med. Bull.*, Vol. 2, 1903, Gieger, p. 1-14; *Philippino Jour. of Sci.*, Vol. 387-401; 1 pl. (Musgrave and Marshall). Also A. Castellani and A. J. Chalmers, in a *Manual of Tropical Medicine*, for 1910, p. 916-918.

and part of the bones surrounding the left lacrimo-nasal duct had been absorbed by the disease. A slate pencil could be passed from the left eye-socket into the left half of the nose, and from thence into the mouth through the opening in the hard palate. Two-thirds of the hard palate was absent, the uvula was absent and the median four-fifths of the soft palate had disappeared. A splendid view of the inferior turbinates could be obtained through the large semi-oval opening in the roof of the mouth. There were no granulating areas in this case; the mucosa of the roof of the mouth had united with that of the floor of the nose at the margins of the cleft. There was a left-sided ulcerative keratitis and iritis probably due to the dryness of that eye from the too rapid escape of tears through and into the mouth. A history of abortions and the scar of a healed leg ulcer, made the differential diagnosis from syphilitic ulcerations of the nose and palate a difficult matter.

Ulceration and perforation of the hard palate is not a rare sequel of syphilis. While serving as chief resident in St. Paul's Hospital, I saw and treated a woman for Dr. P. K. Gilman, associate professor of surgery to the Philippine Medical School of the U. S. Government. This woman was a Japanese prostitute. She had a small perforation of the hard palate, with inflammation (redness, swelling and granulation) at its margins, an ulcer involving both the bony and cartilaginous septum of the nose, and a sub-acute osteoperiostitis of the left tibia. This case differed from the cases seen in St. Luke's Dispensary, in that it was undoubtedly syphilitic, and because of inflammatory reactions which were absent in the St. Luke's cases. She improved under local antiseptic sprays, applications of argyrol and other silver solutions, and with protiodide pills. The St. Luke's cases were not altered by treatment, and all had persisted for years. None of these were examples of congenital cleft palate.

ACCESSORY SINUS DISEASE. There were four cases of accessory sinusitis. The first case, Severino Lorenzo, 35 years old, a native, had been complaining for five months of pain in the right cheek and nose. His cheek was tender, the right side of the hard palate was swollen and tender, the soft palate was thicker on the affected side, catheterization of the normal openings from nose to antrum was impossible on account of a large middle turbinate.

The patient was admitted to the University Hospital, his anterior nares sprayed with permanganate solution; he was etherized, and with Dr. Saleeby's assistance, the anterior part of the right middle turbinate was removed; but the antrum could not be catheterized.

With a small drill, an opening was made, from the outer wall of the nose, just above its floor, into the right antrum. The cheek was then dissected free from the mucous membrane, and a trephine opening was made above the first molar tooth, into the antrum. Thick, grey pus escaped. A rubber drainage tube was passed from the nose into the antrum and thence to the mouth above the tooth. This was secured by safety-pins attached to either end of the tube. Daily syringing with warm permanganate solution caused much pain. The tube was removed about a week later. The openings healed rapidly. After one month of treatment, the man was again etherized; an opening, one-third of an inch in diameter, was made from nose to antrum. The cheek was opened below, and to the outer side of the infra-orbital foramen. The vessels and nerves were pushed upwards, and the canine fossa trephined. The antrum was curetted, old fibrinous clots and muco-pus being removed; after irrigating with warm permanganate solution, a drainage tube was tied loosely to a curved probe and drawn through the antrum from the nose to the cheek, fastened with safety-pins, and a permanganate dressing applied. The tube was syringed daily with permanganate for two weeks, when the tube was removed, and the openings allowed to heal, which occurred two weeks after the removal of the tube. One year later the patient was seen again; he complained of numbness of the gum above the bicuspid teeth, and could not detect a pin prick there, showing that the curettement of the antrum had destroyed the anterior and posterior-superior dental branches of the superior maxillary nerve, which run in the wall of the antrum. This result was hoped for, because his pain had indicated a beginning *tic douloureux*. Two years after the operation he had so little pain that he might be considered cured. The scar was about half an inch long and invisible at fifteen feet.

The second case, Miguel Bantista, six years old, a native, came to the dispensary with a discharging sinus below his right eye. Scar tissue near the sinus had retracted his right lower eyelid down on his cheek, so that the lid could not be closed. A probe could be readily passed through this sinus into the antrum; these symptoms had persisted five months. After cleansing his nose, eye, sinus and mouth, and after anesthetization with ether, the nose was drilled as in the previous case, the second molar tooth was removed, its socket drilled, and a drainage tube passed through the antrum from the nose to the mouth. A transverse incision was made through the tarsal cartilages of his lower eyelid, and the latter bolstered up with pledgets of cotton. Daily syringing with boric acid and with permanganate solutions and treatments with

argyrol failed to improve this case. Two oculists connected with the hospital declined to treat his eyelid until his sinus was healed. A corneal ulcer began to develop, and it was decided to operate again to save the eye. The nasal opening was enlarged, the canine fossa drilled through the cheek into the antrum, as in the previous case, a larger incision was made in the lower eyelid, which was sutured loosely to the forehead. Frequent dressings prevented infection of his eye and allowed the escape of tears. Recovery was uneventful. When last seen, two months after the second operation, there remained but little eversion of the lower eyelid; the corneal ulcer had disappeared, the eyelid could be closed; the discharging sinus had closed, and the various openings into his antrum were healed; pain had ceased.

The third case was in a Chinaman. He complained for a few weeks of pain in his nose and right eye-brow, with tenderness under palpation and percussion over his eyebrow. After cleansing and cocainizing his nose, a curved cannula was passed from the middle meatus of his nose part-way through the infundibulum: some pus escaped. The sound was passed on alternate days for two weeks, and permanganate solutions injected. His symptoms relieved, he disappeared for one month, returning with pain in his right cheek. A small polyp was detected in the right side of his nose, removal of which neither relieved his pain, nor permitted catheterization of his antrum. This being an acute case it was readily handled in the Dispensary; the antrum was drilled through the nose, the cheek and lip dissected free from the gum, and the canine fossa drilled; a rubber drainage tube was passed and the cavity syringed with permanganate solution; recovery occurred in a few weeks, and was uneventful.

NASAL POLYPI. There were twelve examples of this condition. As there was no Wilde's snare in working order, they were removed by combined torsion with a hemostat, and curettement with the finger nail. One of them, Mr. S., is worthy of special mention: Mateo S., a native of Pandacan, who came to St. Luke's Dispensary, December 15, 1908, complaining of dyspnea from obstruction of his nose and throat. Examination with a nasal speculum revealed a pale, yellow-gray tumor blocking both nares, also visible from the mouth in the naso-pharynx. After spraying the nose and mouth with permanganate solution, and applying cocaine, pledgets of cotton of various sizes were prepared in order to plug the nose and prevent hemorrhage. After opening the mouth, the tumor was grasped in the naso-pharynx with two long hemostats; torsion was

applied to the handles with the right hand, while curettement of the naso-pharynx was employed with the index and middle fingers of the left hand in the right and left posterior nares respectively; the tumor was thus removed by enucleation, torsion and extension. Its removal occupied about two minutes. After spraying with hydrogen peroxide to sterilize as well as to control the bleeding, the two fingers of the left hand were placed in the naso-pharynx, and the pledgets of cotton were then packed against them from the front of the nose by means of dissecting forceps, until both nasal fossa were completely plugged. He was given weak permanganate solution to use in case he neglected to return to the dispensary. He removed the cotton too soon and used the solution with resulting hemorrhage, for which he was admitted to the hospital, and the nose re-packed as before. Two days later the cotton was removed, the nose cleansed and re-packed; he was then discharged from the hospital; after a few days' treatment he left the dispensary presumably recovered. The polyp to-day, after two years shrinking in formaline, measures three and a half by one and three-quarters by one and a quarter inches. (See figures 1 and 2). It is, of course, longer lying on the table than when compressed in the nasal fossa and naso-pharynx. It showed cartilage and bloody granulations on the superior surface of its posterior extremity where it was attached in the naso-pharynx. The anterior ends were casts of the inferior meatuses of the two nasal fossae; the color was pale yellow-gray; the consistency moderate.

Of seven cases of tonsillitis, one is noteworthy. The patient was a deaf-mute. Her teacher, Miss Rice, U. S. G., informed me that she had been ill for one week with headache, fever and sore throat. A smear made from a centrifuge specimen obtained by Quincke's puncture, third lumbar interspace, from spinal fluid, showed lymphocytes and a few minute cocci; the fluid was colorless. The right tonsil was badly infected with a suppurative tonsillitis. The patient, a Filipino, aged about 16 years, died the morning after admission to the University Hospital. The autopsy by Dr. Vernon L. Andrews, Associate Professor of Pathology in the Philippine Medical School, U. S. G., showed otitis media suppurativa and suppurating tonsillitis of the right side with a small right-sided purulent meningitis of the temporal lobe of the brain. The report did not show whether the infection had traveled from the tonsil through the Eustachian tube to the ear and brain, or whether the tonsillar infection was secondary to otitis media.

Only a few hypertrophied tonsils were removed. One patient, Benito Baron, aged 16 years, a Filipino, attached to the Protestant--

Episcopal Mission, had had a previous partial removal of the right tonsil. As the tonsillotome was in poor working condition, the remainder of the tonsil was cut away with scissors under ether anesthesia and tubercular glands were removed from the neck. Some necrotic teeth were also removed. Although he was much weakened by chronic dry beri-beri, he recovered completely after a few months' rest in the hill country.

Of the 196 cases of necrotic teeth extracted, five gave rise to Ludwig's angina. None showed streptococci, virulent specimens

Figure 1. Lateral view of a polypoid growth which was attached to the vault of the naso-pharynx and occluded the nares. The position of the turbinate bones is indicated by dotted lines. The patient was an adult male Filipino. The specimen was placed in a dry skull before the drawings were made in order to give the best idea of the size and position.

of which are said to be rare in Manila, despite the fact that cellulitis and erysipelas occur. In six thousand new cases treated during this year in St. Luke's Dispensary, erysipelas was diagnosed three times, and cellulitis nine times, so that virulent streptococci probably occur in Manila, the bacteriologist to the contrary notwithstanding. Of the five cases of Ludwig's angina, all appeared to result from necrotic teeth. Although the necrotic teeth were removed, the abscesses opened wide, swabbed with carbolic acid, alcohol, permanganate, peroxide, argyrol, etc., when the sloughs

came away, none of these foul abscesses showed any tendency to heal, and all five patients died in a few days. A brief summary of this service follows.

Summary of aural, nasal, buccal, pharyngeal and laryngeal diseases seen in St. Luke's Dispensary, Manila, P. I., during the year ending July 1st, 1909:

Diseases of the ear, 83; accessory ear cartilages (multiple ear-cartilages), 2; dermatitis of external auditory canal, 5; foreign bodies in ex-

Figure 2. A view of this nasal polyp as seen from above. Again the turbinate bones are outlined by dotted lines and the nasal septum as well. The actual size of this growth was: from before backward three and a half inches (or 9 cm.), by one and a half inches, from above downward (or 3.8 cm.), and from side to side, in its greatest diameter one and three-quarters inches (or 4.5 cm.).

ternal auditory canal, 2; (fly, 1; kernel of Indian corn, 1); furuncle of external canal, 4; impacted cerumen, 6; mastoid abscess, 3; chronic suppurative otitis media, 53; aural polypi, 5; tumors (sebaceous cyst), 2; Menieres symptom complex, 1.

Diseases of the mouth, teeth, jaw, etc., 223; of the jaw, 12; gingivitis, 7; necrosis of the jaw, 3; pyorrhea alveolaris, 2. Of the mouth:—stomatitis, 4; thrush, 1; ulcer of the tongue, (fraenum) 2. Of the teeth:—caries, 196.

Tumors:—retention cyst of the sublingual 4. (All appeared to result from carious teeth, formed foul abscesses and died.)

Diseases of nose, throat, etc.:—nose, 45; occlusion of the nares from smallpox, 2; rhinitis, simple unclassified, 12; acute, 5; atrophic, 4; hypertrophy of turbinates, 3; rhinophyma, 1; rhinoscleroma, 1; septal ulcers, simple unclassified, 2; luetic, 2; deviated septum, 1; polypi, nasal, 12.

Pharynx, 10; pharyngitis, unclassified simple, 7; pharyngitis, granular, 1; pharyngitis, acute, 2.

Palate, hard, 8; fibroma of, 1; gangosa, 1; gummatous (luetic ulceration of), 6.

Palate, soft:—luetic ulcers of, 2.

Tonsils, 16; hypertrophied, 8; abscess of, 1; tonsillitis, follicular, 3; tonsillitis, simple, 3; enlarged lingual tonsil, 1.

Larynx, 20; laryngitis, acute, 10; laryngitis, tubercular with phthisis, 9; foreign body in, 1.

Sinusitis, 4; frontal, purulent, right side, 1; maxillary, purulent, right, 1; maxillary, purulent, with sinus through malar bone emptying pus on cheek, right side, 1; maxillary, purulent, with polyp in right maxillary sinus, 1.

319 South Sixteenth Street.

Virulence of Diphtheria Bacilli. B. L. ARMS and E. M. WADE,
Jour. A. M. A., March 18, 1910.

The authors report the results of tests of the virulence of diphtheria bacilli. In general they find the organism persisting after a clinical case of diphtheria, virulent, but the non-clinical carriers usually harbor non-virulent organisms. The conclusion previously expressed that in case of diphtheria outbreaks cultural tests of all contacts and isolation of those showing positive cultures is a duty owed to the community, is confirmed. The results of the present study are summed up as follows: "1. Clinical diphtheria is caused by virulent diphtheria bacilli. 2. As a rule, following clinical diphtheria, the organisms retain their virulence as long as they persist. 3. As a rule, virulent and avirulent bacilli are not found in the same case, but, as these cases do occur, several strains should be tested before they are reported non-virulent. 4. In diphtheria outbreaks a large percentage of the 'carriers' harbor virulent organisms, although such carriers may develop no symptoms whatever. 5. Cultures should be taken from all contacts before terminating quarantine in all cases of diphtheria."—*Ex.*