had taken place, and on getting to the house, found that a considerable loss of blood had occurred, and that hæmorrhage was still active. In this case, as in the other, I emptied the uterus of clots and injected hot water, giving at the same time full doses of ergot.

The operation was repeated, although the bleeding had almost ceased with its first application. I was then told by the mother that while nursing her child, which had that morning caused her such agony that she screamed when it was first applied, "she felt as if something had suddenly given way in her womb," and that immediately afterwards she discovered that blood was flowing freely from her. I have not the slightest doubt that the irritation of the nipple had, through the intimate nervous connection of the mammæ with the uterus, caused an irregular spasmodic contraction of the latter organ, and displaced the hæmostatic changes in one or more of its vessels. On this account, and also in view of the remote possibility of long-continued irritation, giving rise to the development of malignant disease of the mammary gland itself, I advised my patient (much to her disappointment) to abandon the maternal function. The nipples had been subjected to long preparatory treatment, and she had provided herself with shields, breast-pumps, &c., but all in vain.

In a third case in which I had lately excised a deep-seated sarcomatous tumour from the left posterior triangle of the neck, I found the application of hot water most useful in arresting the capillary oozing and bleeding from small vessels which would otherwise have obscured the parts which I was dissecting in a region where a false step might have led to serious consequences. The growth dipped under the clavicle, and extended so deeply in the direction of the spinal column that I began to fear that, as is often the case, it was attached, by a pedicle, to the vertebræ. During the operation I was obliged to expose the carotid sheath, and was working in uncomfortable proximity to the sub-clavian vessels—an experience I have no wish again to undergo.

As to the *modus operandi* of hot water thus applied, I believe the direct topical action is to cause contraction of the vessels and favour coagulation of the blood effused from their open mouths. In writing of the physiological effects produced by heat to the spine, Dr. Chapman says that:—

"1st. The temperature of the sympathetic ganglia being raised, the flow of blood to them becomes more copious, and the functions, consequently become more energetic than before.

2nd. Their nervous influence passes in fuller and more powerful streams along the nerves emerging from them, and ramifying over the blood-vessels which they control.

3rd. The muscular bands surrounding those vessels, stimulated by this increased nervous afflux to contract with more than their usual force, diminish proportionably the diameter of the vessels themselves.

4th. The diameter of the vessels being thus lessened, the blood flows through them in less volume and with less rapidity than before, indeed, it is probable that, while the nervous ganglia in question are made to emit their maximum of energy, many of the terminal branches of the blood-vessels acted upon become completely closed."

It is further possible, that the rapidly restorative action, as exhibited in the first case, may be partly, but to a minor extent, due to the direct absorption of the fluid when thrown into a readily absorbent cavity like that of the "post partum" uterus.

It is to be remembered that water is an absolutely non-irritating, and when boiled, aseptic (as far as living organisms are concerned) liquid; and I am not aware of any dangers connected with its use as described.

For the application in "post partum" hæmorrhage, nothing is required beyond a Higginson's or ordinary enema syringe, with tube sufficiently long to reach the uterus. The temperature of the water should be about 120°, or, in the absence of a thermometer, as hot as the immersed elbow can bear it.

BAKLOH;
30*th November*, 1888.

FOUR CASES OF RHINO-SCLEROMA.

BY SURGN.-MAJOR D. F. KEEGAN, M.D. (*Dublin*),
Residency Surgeon, Indore.
(WITH HISTOLOGICAL NOTES BY DR. D. D. CUNNINGHAM.)

Case I.—Kasiram, aged 35 years, a male Hindoo and a josi by caste, was admitted into the Indore Hospital on the 7th April 1888, suffering from rhino-scleroma. He gave the following history: Ever since his childhood, he has noticed that a slight bloody discharge came away from the nose in the morning twice or three times during the year. This occurred during the hot season, and was generally accompanied by sneezing. Two years before admission into hospital, crusts used to form inside both nostrils, which, as often as they were removed by the finger nail, would form again. About a year ago a small growth, the size of a pea, made its appearance on the inside of the left ala nasi, about half an inch from its free border. It grew larger and larger until it finally blocked up the nostril in front and distended the ala nasi. Seven months ago a similar growth appeared at the corresponding site in the right nostril, and gradually increased until it blocked up this nostril also. For some

time he has experienced much inconvenience from inability to breath through the nostrils and has lost all sense of smell.

Present condition.—Both nostrils are plugged by a firm, indolent, and projecting growth. The colour of the growth is of a livid or bluish red. The columna of the nose is intact. The nose is increased in width, and its integument over the nasal bones puckered. The upper two-thirds of the upper lip for a space corresponding with the breadth of the nose, have been invaded by an elevated bossy induration. This induration is continuous with the lower portion of both alæ nasi, and has worked its way through or invaded the whole thickness of the upper lip, and has attacked the gum in front of the two incisor teeth of the upper jaw. On everting the upper lip, its mucous membrane where it joins with the gum of the two incisors is found ulcerated. The two incisor teeth are loose, but the growth has not yet attacked the gum at the back of the two incisors. The patient does not suffer much from actual pain, and has sought relief because of the disfigurement caused by the disease and on account of the great inconvenience he experiences in not being able to breath through the nostrils.

This patient remained in hospital until the 10th September 1888. The treatment I adopted consisted in cutting or gouging out, on three several occasions, under chloroform, the growth which had plugged up the nostrils, and which I found had also filled up the nasal cavity. I thus established a free channel of communication between the anterior and posterior nares on both sides, and by the aid of two silver nasal cannulæ the patient was enabled to breath comfortably. The wearing of the silver cannulæ prevented any contraction of the cicatrix caused by the gouging out of the growth. I also cut away with the knife the bossy induration which had invaded the upper lip; but none of these operative procedures occasioned any inflammatory symptoms. During the five months he remained under treatment, he took ten grains of iodide of potassium three times daily. I sent specimens of the growth removed in this case as in the three succeeding ones to Dr. D. D. Cunningham, of Calcutta, who has kindly promised to append his observations on their histological features.

Case II.—Teeka, aged 45 years, a male Hindu, a Rajput by caste, was admitted into the Indore Hospital on the 6th May 1888, suffering from advanced Rhino-scleroma. He gave the following history: About ten years ago a small pimple or growth appeared inside the upper lip underneath the columna nasi. It gradually increased, burst, and then formed an ulcer. The growth then attacked the inside of the nose and also invaded the upper lip. Four or five years ago his hearing became impaired, and for the last two years he has become completely deaf. Indeed the deafness is so great that it was only after great trouble I succeeded in eliciting this very imperfect and meagre previous history of his disease.

Present condition.—Both nostrils are completely plugged with an extremely dense and indolent growth. The nose is increased in width, and its integument over the nasal bones slightly puckered. There is much deformity. The entire upper lip has been invaded by an extremely indurated and destructive infiltrating pathological product which appears in the form of brownish red papillæ or tubercles. There is no œdema or inflammatory symptoms near the margins of this growth on the lip. This growth is two inches in width and three quarters of an inch in vertical measurement, and is continuous with the firm indolent growth which plugs up both nostrils. The lip is thickened and slightly inverted, and its mucous membrane has disappeared completely. In the upper jaw the incisors, the canine, and the left bicuspid both have disappeared, and the anterior half of the hard palate has been invaded by the same kind of growth which has attacked the upper lip. The soft palate has also been invaded, and the uvula has disappeared. The muscles which bound the tonsils anteriorly and posteriorly are almost as hard as cartilage, and are thickened and hypertrophied and the space existing between much narrowed. The tonsils themselves are almost of stony hardness, and the back of the fauces is much indurated. The dense and indolent growth which fills up the nostrils and nasal cavity has extended into the nasal duct and attacked the inner canthus of the right eye. The deafness has, no doubt, been caused by the growth pressing on or filling up the openings of the eustachian tubes. In this case the patient experienced great pain when pressure was made on the morbid growth which had invaded the upper lip. The treatment adopted was similar to that carried out in the preceding case: but, with the exception of establishing a channel of communication between the anterior and posterior nares, I was not able to ameliorate his condition. The topical application of iodoform relieved the pain, and I think, he derived some benefit from the iodide of potassium. He remained under treatment until the 28th August when he left for his home.

Case III.—Nathibai, aged 43 years, a Hindu female, a Rajput by caste, was admitted into the Indore Hospital on the 5th July with Rhino-scleroma. She gave the following history: About five or six years ago, a small growth appeared in the left nostril near the front of the septum. It gradually grew larger and larger, and about three years ago it had completely blocked up the nostril on that side. About a year ago a similar growth appeared in the right

nostril, and gradually increasing in size, in the course of six months it blocked up this nostril also.

Present condition.—The left nostril is completely plugged with a firm indolent and projecting growth of a livid hue. The growth in the right nostril is of the same character as in the left, but does not project. The columna nasi is pulled down, and the nose is lengthened and considerably widened. There is much deformity. She has lost all sense of smell and suffers much inconvenience from the plugging of both nostrils. She has, however, never experienced any pain in the nose. The growth has not yet attacked the upper lip. Under chloroform, I gouged and cut away the growth inside the nostrils and inserted nasal cannulæ, giving her much relief, and she left the hospital much improved as regards her breathing on the 31st August 1888.

Case IV.—Nyadreebai, aged 20 years, a Hindu female, was admitted into the Indore Hospital on the 29th September 1888, with Rhino-scleroma. She gave the following history: Four years ago she fell on her face and bled freely from the nose at the time of the accident. The nose became much swollen as the result of the accident, and the swelling did not entirely subside for a fortnight. She soon observed a small pimple or growth about the size of a pea just where the columna nasi joins on to the lip. The growth slowly increased upwards, and a watery discharge issued from the growth. In the course of a year and a half the growth had blocked up the right nostril. Six months after the right nostril had become filled up, the growth invaded the left nostril, and eventually plugged it up also. The growth then descended and invaded the upper lip. The growth from the beginning was ulcerated.

Present condition.—Both nostrils are completely filled up with an indolent ulcerated growth, which has also attacked the greater portion of the upper lip. The growth on the upper lip is raised considerably above the level of the surrounding healthy tissues, and is by no means so indurated as that met with in any of the three preceding cases. It has, however, invaded nearly the whole depth of the upper lip, and has involved the gum over the incisors and canine teeth of the upper jaw, and has attacked the hard palate for about half an inch. On the 5th October the patient being placed under chloroform, I cut out the growth in the nostrils and inserted cannulæ the next day. The operation was accompanied by a good deal of bleeding. On the 2nd November, I shaved off the elevated growth which had attacked the upper lip. Ten grain doses of iodide of potassium were administered three times daily early in October, and were continued till the 24th of November, when she suddenly disappeared from hospital. Perhaps the age of the patient and the comparatively less indurated character of the growth will account for the marked benefit derived from the administration of the iodide of potassium in this case.

Remarks.—I am not aware that the occurrence of this very rare disease has been previously noticed by medical practitioners in this country; but that Rhino-scleroma exists in India, there can be no doubt. During the past seven years as many as eleven cases of Rhino-scleroma have been admitted into the Indore Charitable Hospital, and my friend, Dr. O'Connell Raye, tells me that a case of this disease has lately come under his care at the Medical College Hospital, Calcutta, which, no doubt, he will report. In former years I used to designate such cases as Scleroderma of the nostril, and it is only since I had the advantage of reading the Harveian Lectures on Lupus by Mr. Jonathan Hutchinson, delivered in December, 1887, that my attention has been especially attracted to this rare form of disease. Since then I have read Hebra's description of the disease in the third edition of the late Tilbury Fox's work on Skin Diseases, but Kaposi's description of the disease I have never read. As Newmann has ranked Rhino-scleroma with Scleroderma, the designation or nomenclature which I gave to a disease which I had never seen in Europe and about which I knew absolutely nothing cannot be considered so very unhappy. But, on reading Mr. Jonathan Hutchinson's Harveian Lectures, I at once recognised the similarity between the cases which I used to designate Scleroderma of the nostrils and Rhino-scleroma; and, curiously enough, during the last ten months as many as four cases of this rare disease have been admitted into the Indore Hospital, the histories of which I have now very imperfectly detailed. Dr. Payne, in his Manual of General Pathology, states that this disease has been only seen in the Eastern parts of the Austrian Empire, in Italy, Egypt, and South America: but for the future India will also be included in the geographical distribution of Rhino-scleroma. I am not competent to offer any opinion regarding the histological features of this rare disease; but fortunately my deficiencies in this respect will be made good by Dr. D. D. Cunningham. That this disease differs from Lupus is certain, but I think it cannot be disputed that there is a certain family likeness between the two maladies. In my experience, however, Lupus is much less frequently met with in India than in Europe. Should the specimens of the growths which I have forwarded to Dr. Cunningham present all the histological features characteristic of Rhino-scleroma, then the four cases which I have just detailed prove that this disease is certainly not confined to young adults.

NOTE BY DR. D. D. CUNNINGHAM.

THROUGH the kindness of Dr. Keegan, I have had an opportunity of examining specimens of the neoplasm in all the cases which he has described above. The histological features in all of them are characteristic of Rhino-scleroma as ordinarily described, save that, as yet, no success has attended attempts at demonstrating the presence of unequivocal bacilli. The most varied methods of staining have been employed, from those recommended by Cornil and Babes* and Payne,† to that recently described by Melle;‡ but as yet, at all events, to no purpose. Beautifully stained specimens of large cells containing particles or masses of peculiar colloid, hyaline matter abound, especially in sections treated with gentian-violet, according to the method of Gram. In some cases the entire cavity of the cell appears to be occupied by a single large sphere of the substance, in others mulberry-like aggregates of smaller spherules are present, and in still others curiously irregular fragments, crystalloid forms or mere minute particles fill the cells more or less completely. In one case, at all events, the particles in some of the cells are more or less rod-like or diplococcoid in character, but I have as yet been unable to satisfy myself that this is due to their being of schizomycete nature. The details of structure of the neoplasm differ considerably in different cases, and in specimens from different sites in the same case. In all cases a network of fibres is present representing to a great extent at all events the opened-out fibrous tissue normal to the site in which the new growth has occurred. In most cases there is comparatively little evidence of active growth in the connective tissue fibres, but here and there bands of embryonic fibres occur. Occupying the meshes of the fibrous network are masses of cells of two kinds—minute granulation cells with a large nucleus and scanty cyloplasm, and large cells with reticulate, vacuolate cyloplasm, and one or two nuclei. The walls of the blood vessels are thickened, and any glandular structures proper to the site appear in most cases to have entirely disappeared. The consistence of the tumour varies very considerably in different cases, in some being very firm, and in others of a peculiar corky character. In one case the tissue was of a peculiar, horny texture, and this appeared to be connected with exclusive accumulation of endothelial elements in its substance. In some instances the histological characters very closely resemble those present in typical specimens of Dehli sore, the principal differences being that they show much less evidence of active proliferation of epithelium, and that the large cells of the granulation tissue are present in much larger numbers than they usually are in Dehli sore. Large cells precisely resembling those so abundant in Rhino-scleroma do, however, occur in small numbers in the tissue of Dehli sore, and, as I pointed out some years ago,§ they frequently contain peculiar hyaline masses and particles precisely similar to those so characteristic of the cells in Rhino-scleroma and occurring more rarely in the tissues in cases of elephantiasis and other morbid growths.

* "Les Bactéries et leur Role dans l'an anatomie et l'histologie Pathologiques des Maladies Infectieases," p. 650 Par A. V. Cornil & V. Babes. Deuxieme éd. Paris 1886.

† "Manual of General Pathology." London, 1888. p. 509.

‡ Quoted in "Centralblatt für Bakteriologie und Parcisetenkunds," 1888. Vol. IV, No. 22, s. 677.

§ "Scientific Memoirs by Medical Officers of the Army of India." Part I, 1885.

A Mirror of Hospital Practice.

HOSPITAL OF THE 1-4 GOORKHAS.

DEEP-SEATED TUMOUR OF THE NECK—SUCCESSFUL REMOVAL.

BY SURGEON-MAJOR A. SCOTT REID, M.B.

THE late Professor Spence of Edinburgh, with whom the neck was a favourite field for practice, has described operations for the removal of deep-seated tumours in this region, as being "perhaps the most difficult in Surgery," and I well remember that, on the last occasion, shortly before his death, on which, while home on furlough, I saw my old teacher remove a large fibroma in whose substance the carotid sheath was imbedded, the proceedings occupied more than an hour, although the scalpel was guided by a Surgeon, second to none in this operation, and whose "right hand had not yet lost its cunning."

If such be the view taken by one in the first rank of the profession, and surrounded by all the auxiliary skill available in a large city hospital, how much more formidable does the operation appear, when, as in the following instance, my right-hand man was a hospital assistant—a very ignorant specimen of a very inefficient class—who confessed that his only experience in operative surgery had been gained by witnessing a single lithotomy, when a student, some ten years previously.

Sepoy Sobhân Singh Rana, of the 1-4 Goorkhas, aged 29, service 7 years, presented himself at hospital on the morning of the 25th August 1888, with a tumour in the left posterior triangle of the neck, which, he stated, had attracted his notice only a week, previous to that date. The patient had been under treatment for "debility" from the 22nd June to the 4th July, and, when discharged, the existence of a tumour had not been noticed. The man was of rather cachectic appearance, and complained of a good deal of pain in the tumour which he said had grown rapidly.