

PRECIS OF OPERATIONS PERFORMED IN
THE WARDS OF THE FIRST SURGEON,
MEDICAL COLLEGE HOSPITAL, DURING
THE YEAR 1886.

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(Continued from page 138.)

VI. REMOVAL OF TUMOURS (*by Excision*).

A.—MALIGNANT TUMOURS.

VI. i. Scirrhous of mamma and axillary glands.—i. European, *æt.* 45. Tumour of left breast of three months' duration. Skin not involved. Nipple not retracted. General health fair. Gland removed by elliptical incisions. Two cancerous glands removed from the axilla. Edges of incision brought together by metallic and horse-hair stitches, and an incision made for drainage in the lower flap. Dressed antiseptically. Wound remained aseptic, and healed by first intention, except about two inches of its centre which was closed by granulation. No constitutional disturbance of consequence. Discharged 21 days after the operation. Returned in a few days complaining of palpitation which was found to be functional, and subsided under treatment.

ii. Hindu, *æt.* 42. Tumour of left breast of two years' duration. Skin involved and nipple retracted. Axillary glands enlarged and indurated. General health fair. Gland extirpated by two elliptical incisions. Axillary glands removed. Wound closed by metallic and horse-hair sutures. Dressed antiseptically, and remained aseptic. Left hospital with a sound cicatrix fifteen days after the operation.

iii. Hindu, *æt.* 56. Scirrhous of right breast of five months' duration. Skin implicated. Nipple retracted. Axillary glands diseased. A few enlarged and indurated glands also above clavicle. An incision about two inches long was, in the first instance, made above the clavicle parallel to the sterno-mastoid for the purpose of, if possible, removing the diseased supra-clavicular glands. These glands were taken away by means of the finger, and no more were felt. The breast was then removed including the skin covering it. The axilla was thoroughly emptied of glands. Several small hard glands were found beneath the clavicle and between the pectoral muscles. A curved incision was made below the axilla to permit of the transplantation of skin upwards and forwards to fill the large gap caused by the free removal of skin. A drainage tube was carried under the clavicle from the neck wound to the lower angle of the axillary wound, and the whole dressed antiseptically with great care. The wound remained sweet for three days, then putrefied. Suppuration took place, and high fever and diarrhoea ensued. Pronounced symptoms of septi-

cæmia of a severe type set in on the twelfth day, and patient was removed in a moribund state fourteen days after the operation.

* * * This was a very severe operation; but there is every reason to think that the case would have done well had the wound remained aseptic.

The wound probably became septic in consequence of the movements of the head disturbing the upper portion of the dressing. Efforts were made by means of injections to extirpate putrefaction, but without avail.

iv. Eurasian, *æt.* 40. Tumour of left breast noticed two months ago. Skin not adherent; axillary glands enlarged and indurated; general health delicate. Mamma removed by elliptical incisions including nipple. Several diseased glands removed from axilla. Edges of wound brought into accurate contact, and a hole made in the lower flap for drainage. A small portion of the lower flap sloughed at the centre of the wound and some suppuration took place around it. The rest of the wound healed by first intention. The drainage tubes were gradually shortened. Left hospital 31 days after operation with the wound nearly healed.

v. Hindu, *æt.* 30. Cancer of the right breast of 11 months' duration; skin involved; axillary glands enlarged and indurated. Breast extirpated together with the skin covering it. Axilla thorough cleared. A large flap was taken from the side of the chest and moved upwards and inwards to fill up the wound. It was stitched with catgut, and two triangular gaps left on each side to heal by granulation. Wound remained aseptic. Flaps contracted adhesions and the intervals between them healed by granulation. Patient remained in hospital 80 days.

2. Removal of recurrent cancerous glands.—

i. European male, *æt.* 55. Had been operated on for epithelioma of tongue (see *e*, *i*, below). A gland situated beneath the left sterno-mastoid became enlarged and was enucleated on the 11th of February. The wound healed within a week.

ii. Same case. Another gland beneath the same muscle, lower down, underwent enlargement and was extirpated on the 20th of March; the wound healed rapidly, but the disease recurred at the root of the neck beyond reach of operation. He left the hospital on the 23rd of April.

3. a. *Epithelioma of the Scalp.*—Hindu female, *æt.* 45. Had a tumour of the occiput from childhood, which attained the size of a foetal head and was removed eight months ago. It has recurred and presents the appearance of a large cauliflower excrescence. It was removed together with a liberal margin of sound scalp. The tumour was adherent to the occipital protuberance which was chipped off with a chisel. The wound remained aseptic and healed by granulation. She remained in hospital 70 days, and

on her discharge no sign of recurrence was observed. She has not been heard of since she left hospital.

b. Epithelioma of the nose and face.—Hindu male, *æt.* 45. A small nodule appeared at the tip of his nose four months ago, which rapidly increased and spread until the disease involved the whole of the upper lip, whole of the nose as far as the bridge, and the adjacent cheek to some extent. The tumour presented the characteristic signs of epithelioma. It was isolated by two incisions starting from the angles of the mouth and meeting over the nasal bones. The growth was undermined and removed, leaving the patient without an upper lip and nose. Symmetrical flaps were cut from the cheek to supply their place and stitched together in the middle line. Some diseased glands were also removed from below the jaw. Patient got high reactive fever. Diarrhoea set on on the third day, and he died of exhaustion 60 hours after the operation.

c. Epithelioma of the cheek.—Hindu female, *æt.* 50. Was in the habit of chewing lime and tobacco leaves since the age of nine; noticed a growth on the inside of the right cheek 1½ years ago. It now extends from the angle of the mouth to the level of the last molar, and from about an inch below the upper alveolus to the lower, which is to some extent implicated. Tongue and floor of mouth healthy. Cheek divided by an incision curving from angle of mouth outwards and downwards. Growth isolated and removed by division of buccal mucous membrane. One tooth extracted and gum of lower jaw removed together with subjacent alveolar process; a diseased gland removed from below angle of lower jaw. Wound carefully stitched. It healed by first intention in 14 days. Patient left hospital 27 days after operation. No sign of recurrence.

d. Epithelioma of lower lip.—Eurasian male, *æt.* 37. Observed a growth of the right side of the lower lip three years ago. During the last month the right submaxillary gland has been undergoing enlargement. The growth now occupies the right half of the lower lip, and the right submaxillary gland is large and indurated. The right half of the lip was removed by a V shaped incision, and the submaxillary gland enucleated through a straight incision. Both wounds were carefully stitched and healed by first intention. He left hospital 22 days after the operation. Some induration remained in the submaxillary region. He was subsequently readmitted with a recurrence of the disease (See *f, i* below).

e.—Epithelioma of the tongue.

i. European male, *æt.* 55. About 10 years ago noticed a small growth on the tongue which is said to have been cured by a Persian physician. Two years ago this growth re-appeared, and has

been extending ever since. He suffered from syphilis in youth, and under the impression that the growth was syphilitic, he was treated with large doses of iodide of potassium without avail. The left side of the tongue is occupied by an indurated sloughy ulcer which extends from the tip to the anterior pillar of the fauces, which is implicated. The left sublingual gland is enlarged and indurated. Total extirpation of the tongue was performed on the 8th of January. The floor of the mouth was divided externally in the middle line by an incision extending from the symphysis to the hyoid bone. Two needles were passed from this wound beneath the lingual artery and brought out below the angle of the lower jaw; the tissues between the surface and the needles being compressed by an elastic cord passed round the projecting ends. The deep attachments of the tongue were then separated by the finger and divided with scissors. The left sublingual gland was removed, and the operation completed by the ecraseur. A drainage tube was placed in the submental wound, and the parts freely sprinkled with iodoform. The wound healed slowly by granulation, and was soundly cicatrized. Patient was able to talk very distinctly and retained some sense of taste, being able to distinguish salt from sugar.

The disease subsequently recurred in the glands of the neck, and two operations were performed for their extirpation on the 11th of February and 20th March (see *2 i, ii, above*). Recurrence again took place beyond reach of operation, and he finally left hospital on the 23rd of April.

ii. East Indian female, *æt.* 72, admitted with a warty growth on the right side of the tongue about the size of a hazel nut of five months' duration. The growth was removed by curved scissors and the edges of the wound stitched with catgut. It healed in 7 days, and patient left hospital 13 days after the operation.

Recurrence subsequently took place in the cervical glands situated beneath the right sternomastoid. (See *g, below*.)

f.—Epithelioma of the lower jaw.

i. Eurasian male, *æt.* 37, had undergone operation for cancer of the lower lip and submaxillary gland. (See *d, above*.) Readmitted one month after the operation with a hard rapidly growing lump in the right submaxillary region; skin infiltrated. A triangular piece of skin was removed with all the morbid material underlying it, including the lower border of the lower jaw to which it adhered. The dissection was deep and difficult. The wound was closed by flaps taken from the neighbourhood. It did well, but recurrence again took place in the neck and cheek, and patient declining further operation, which indeed was not pressed, left the hospital 55 days after the last operation, and was subsequently reported to have died.

ii. J. C., aged 30, an Englishman, and engine-driver by occupation, was admitted on the 11th of November 1886. In the preceding January he had had an operation performed for cancer of the lower lip. He remained well till August when a swelling formed beneath the chin which gradually increased, and finally burst, leaving an open sloughy sore with an extensive and deep indurated base.

On admission, the disease was found to involve the lower lip, chin and lower jaw, and extend down the front of the neck as far as the episternal notch. The man was fairly nourished, but suffered from bronchitis. The larynx was found to move up and down during deglutition, and no enlarged gland could be detected. At the patient's urgent entreaty an operation was performed. The central half of the lower lip was isolated by vertical incisions which were carried to the angles of the lower jaw, and along the anterior borders of the sterno-mastoids as far as the episternal notch where they met. The lower jaw was divided at the angles, and the whole of the tissues included in the incision removed down to the surface of the larynx. Both submaxillary and sublingual glands were taken away, and the body of the hyoid bone, which was eroded, removed. The operation was of a very formidable character, and some 60 vessels had to be ligatured. The edges of what remained of the lower lip were brought together. Laryngotomy was found to be necessary owing to the falling back of the tongue and epiglottis. The wound was sprinkled with iodoform, and dressed with boracic gauze. Patient was fed at first per rectum, and then by a funnel and tube passed into the oesophagus. The parts gradually healed. The lower lip adhered, and the wound on the front of the neck underwent granulation, cicatrization and contraction. Patient was taught to feed himself, and improved greatly in general health. He continued to wear the tracheal tube; but was able to walk about the hospital grounds. About two months after the operation, infiltration of the skin was observed at a little distance from the wound on either side.

These lumps have extended and ulcerated, and are now rugged sloughy open sores set on a deep, hard, extensive base exactly resembling that which existed on his chin when he was admitted. He is emaciating, and the end is not far off. (Died 31st May).

g.—*Epithelioma of the neck (recurrent).*—Patient had undergone an operation for cancer of the tongue (e ii) on the 28th of April. In the middle of August she noticed a swelling below the right ear which has been gradually increasing. It is about the size of an orange, hot red and tender, and movable. On the 23rd of October an attempt was made to remove the tumour; but it was found to embrace the

carotid artery and internal jugular vein, and the operation was not completed. As much of the cancerous material as had broken down was scraped away, and the wound left open and dressed antiseptically. Patient lived for 52 days; the tumour increased and fungated, and death was due to exhaustion.

h.—*Epithelioma of the penis and inguinal glands.*—Hindu male, *at.* 32. The disease appeared eight months ago. The glans and prepuce are involved and the inguinal glands on both sides. The penis was removed by Hilton's method, the corpus spongiosum being cut half an inch longer than the corpora cavernosa, slit on the ventral aspect and attached to the lower angle of the wound by a few horse-hair sutures. The inguinal glands were extirpated by incision parallel to Poupart's ligament; they were beginning to break down. The penis healed well, but recurrence took place in the groins. Patient lived for 38 days, and died of exhaustion due to fever and diarrhoea. The fever existed prior to the operation and persisted to the end. The diarrhoea set in 20 days before death and proved uncontrollable.

* * The foregoing record of 17 operations for cancer, concerns 13 cases; two patients having undergone a second operation and one patient two secondary operations for recurrence. Two of the patients had moreover been subjected to a primary operation before admission. Of the 13 persons, 4 died in hospital, 2 left hospital in a hopeless state, 1 is still in hospital in a dying state, and 6 recovered and left hospital without any sign of recurrence. Four of these were cases of scirrhus of the breast, in which a thorough removal of axillary glands was resorted to in addition to extirpation of the mamma and free removal of the affected skin. The record is a melancholy and disheartening one. In the cases in which recurrence occurred, this took place in all but one instance in the nearest lymphatic gland. The experience of the year reiterates the old lesson, that the only hope of success in operations on cancer consists in very liberal ablation of tissues in the vicinity of the disease, and the careful removal of suspicious glands in the neighbourhood. Even when these measures have been adopted with an unsparing hand, the result is too often disappointing and disastrous.

4. a.—*Excision of Sarcoma of the left Upper Jaw.*—Hindu male, *at.* 19. Five months ago a swelling of the left upper jaw was noticed, which has rapidly increased in size. It involves the whole of the left superior maxilla and part of the malar bone. The eye is not displaced, but there is a large bulging of the alveolar and palate processes into the mouth. The whole of the left upper jaw bone and malar were removed in the usual manner. Fergus-

son's method of dividing the skin was followed. The wound was accurately closed by horse-hair stitches, and the cavity stuffed with boracic lint sprinkled with iodoform. The skin wound healed by first intention, and patient left hospital 24 days after the operation with a sunken cheek and a hole about $\frac{1}{2}$ an inch in diameter in the roof of the mouth. He returned a few months afterwards with a recurrence of the tumour in the angular process of the frontal bone and roof of the orbit. A second operation was not considered feasible.

b.—*Sarcoma of the hard Palate.*—Hindu male, *æt.* 35. Soft tumour of hard palate involving also the alveolar processes of both superior maxillæ as far as the bicuspid teeth; of five months' duration; very vascular and ulcerated on the surface, bleeding profusely. The upper lip was divided in the middle line and the incision carried into the nostrils. The soft parts were raised off the surface of the tumour, and the soft palate divided horizontally. The cartilaginous septum of the nose was divided, and central portions of the upper jaw together with the tumour removed by means of a bone forceps. A good deal of blood was lost. Patient died of shock in six hours. The tumour was found to be a small round-celled sarcoma.

c.—*Sarcoma of the shoulder.*—Mahomedan male, *æt.* 50. Had a tumour removed from the top of the right shoulder seven years ago. It reappeared six months ago, and has attained the size of a hen's egg. It is freely movable, is soft and fluctuating and has been bleeding for the last few days. It was removed with a liberal margin of adjacent skin, and a flap was taken from the shoulder to cover the wound. Repair was satisfactory, and patient left hospital with a sound cicatrix in 33 days. The tumour was found to be a spindle-celled sarcoma.

d.—*Sarcoma of the Arm.*—Hindu male, *æt.* 27. Tumour of middle head of left triceps of three years' duration, skin not implicated. It was exposed by a longitudinal incision and thoroughly removed together with the long head of the triceps. The wound healed by first intention, and patient left hospital 19 days after the operation. He has not been heard of since.

e.—*Sarcoma of Back.*—Hindu male, *æt.* 30. Had been operated on two years ago for a tumour of the back of about six years' duration. The growth soon recurred and it is now 4 inches long by 2 inches broad, soft fungating but movable; situated between the spine and right scapula. It was removed together with a free margin of adjacent skin and liberal amount of subjacent tissue. The wound healed by granulation in 63 days.

f.—*Sarcoma of the Buttock.*—Eurasian female, *æt.* 52. Noticed a tumour on the right gluteal region 9 months ago, which was removed five months ago. Another tumour had grown

on the scar. It is about the size of a pigeon's egg, and involves the skin and subjacent fascia. It was removed together with a liberal margin of surrounding tissue. The wound healed by granulation in 40 days.

B.—NON-MALIGNANT TUMOURS.

i. *Elephantiasis of the Scrotum.*—i. Hindu, *æt.* 21. Had a suppurated hydrocele twelve years ago. Scrotum began to enlarge four years ago. Tumour removed by the method referred to below; weighed 7 lbs 10 oz. after removal. Wound remained aseptic; deep dressing removed after 14 days. Remained in hospital 74 days.

ii. Hindu, *æt.* 40. Two years' duration. Tumour removed as usual; weighed 2 lbs 2 oz. Wound remained aseptic; deep dressing changed after 12 days. Left hospital 51 days after operation.

iii. Hindu, *æt.* 25. Six years' duration. Usual operation. Tumour weighed 5 lbs 9 oz. Wound remained aseptic, and healed in 59 days; deep dressing removed in 16 days.

iv. Hindu, *æt.* 43. Small tumour of four years' duration. Health good. Usual operation. Weighed 12 oz. Wound remained aseptic. Left hospital in 49 days.

v. Mahomedan, *æt.* 35. Tumour of two years' duration. Health good. Excised in the usual way. Weighed 1 lb 1 oz. Wound remained aseptic. Left hospital 84 days after operation.

vi. Hindu, *æt.* 50. Scrotal tumour of four years' duration. Has had hydrocele for 15 years. Legs also elephantoid. Suffering from fever. Addicted to hemp. On subsidence of the fever, the tumour was removed in the usual manner. An abscess existed in the right side of the scrotum. Severe fever set in on the evening of the second day, and lasted for two days, when the temperature became subnormal and patient became weak and delirious. Prostration ensued, and death by exhaustion occurred six days after the operation. The wound remained aseptic. A *post-mortem* examination could not be obtained.

vii. Mahomedan, *æt.* 39. Tumour of twelve years' duration. Health good. Usual operation. Weighed 2 lbs 8 oz. Wound remained aseptic. Left hospital 62 days after operation.

viii. Hindu, *æt.* 30. Small tumour of one and a half year's duration. Health good. During the operation an unobiterated processus vaginalis was found on the right side. It was isolated, tied at the external ring, and the remainder removed. The operation was completed in the usual way. An abscess formed on the right side, which was opened in the groin and drained. The wound healed by granulation, and patient left hospital 62 days after the operation.

ix. Mahomedan, *æt.* 40. Has suffered from hydrocele for 15 years. The scrotum has under-

gone thickening of late with periodical attacks of fever. Health good. The thickened skin was removed in the usual way, the hydrocele emptied, and the redundant tunicae pared off. The testes were stitched in pockets. Wound remained aseptic. Left hospital 62 days after operation.

x. Hindu, *et. 40.* Scrotal tumour of ten years' duration. Health good. Removed in the usual manner. Weighed 3 lbs 15 oz. Wound remained aseptic. Left hospital 59 days after operation.

xi. Hindu, *et. 25.* Small tumour of two months' duration. Health good. Inguinal glands on both sides enlarged and breaking down. Tumour removed by the usual operation. Weighed 1 lb 15 oz. Inguinal glands extirpated. Wound remained aseptic, and healed by granulation. Left hospital in 53 days.

xii. Hindu, *et. 38.* Scrotal tumour of three years' duration. Health good. Operation as usual. Large hydrocele containing 16 oz. of fluid on right side. Tumour weighed 8 lbs. The edges of the flaps covering the testes sloughed to a slight extent. The sloughs separated and wound healed by granulation. Left hospital 65 days after operation.

xiii. Mahomedan, *et. 25.* Scrotal tumour of four years' duration with right inguinal reducible hernia. Health good. The tumour, which weighed 13 oz., was removed in the usual way, and the sac of the hernia was then isolated, tied at the neck, and removed. The pillars were brought together by catgut. Suppuration took place in the hernial wound, and a small abscess also formed in the perineum. With these exceptions, repair proceeded in a favourable manner, and patient left hospital quite cured of both tumour and hernia in 65 days.

xiv. Mahomedan, *et. 40.* Tumour of two years' duration. A few lymphatic vesicles on the surface; double hydrocele. Health good. Operation as usual. Weighed 1 lb 7 oz. Wound remained aseptic and healed in 70 days.

xv. Eurasian, *et. 35.* Had a small scrotal tumour removed in 1880. Underwent an operation shortly afterwards for adhesion of the under surface of the penis to the cicatrix. Had a small lymph-scrotum removed in 1885. This healed soundly, but the skin on each side of the scar has again become spongy and hypertrophied. This skin was thoroughly removed by an elliptical incision, and the edges stitched. The wound remained aseptic and healed in 38 days.

xvi. Hindu, *et. 35.* Tumour of eight months' duration. Development accompanied with periodical fever. Health good. Usual operation performed. Large hydrocele on right and small on left side; tumour weighed 1 lb 10 oz. Wound remained aseptic and healed in 72 days.

xvii. Hindu, *et. 45.* History of two attacks of gonorrhœa, the last four months ago,

followed by swelling of the scrotum. Meatus urinarius contracted and glands indurated. The meatus was slit open, and a No. 12 catheter easily passed into the bladder. The glans was removed, and the tumour excised in the usual way. It weighed 1 lb. The wound healed kindly, and patient left hospital 49 days after operation.

xviii. Hindu, *et. 28.* Very large tumour of five years' growth, engorged with blood and serum and covered with gangrenous patches. Suffering from high fever. Evening temperature 103°. The fever abated under treatment, the gangrenous patches sloughed off, and an operation was performed six days after his admission in the usual manner. The tumour weighed 31 lbs, and both tunicae contained fluid. The wound was a large one and underwent putrefaction on the third day. It became aseptic in a week; during this period there was considerable fever, temperature ranging from 99° to 103°. Repair took place by granulation, and patient left hospital 75 days after the operation.

xix. Hindu, *et. 40.* Scrotal tumour of seven years' duration. Health good. Usual operation. Right tunica contained 6 pints and 2 oz. of fluid. Tumour weighed 8 lbs 4 oz. Wound got fetid on the sixth day, and some sloughs formed on the surface. There was slight fever at this period. About 35 days after the operation patient got an attack of acute eczema all over his body which was thought to be due to the bichloride of mercury. Iodide of potassium was administered internally, and boracic dressings substituted for the bichloride. The eczema disappeared and patient left hospital quite well 64 days after the operation.

xx. Hindu, *et. 38.* Got acute hydrocele six years ago. Both tunicae tapped and injected a year afterwards. Since then the scrotum has undergone enlargement with periodical fever. Spleen enlarged; has fistula in ano. Consumes five grains of opium daily. Tumour removed in the usual way; weighed 12 lbs. 2 oz. Wound remained aseptic, and recovery took place in 63 days.

** The operation in these cases was performed according to the plan minutely described in a clinical lecture which was published in the issue of the *Indian Medical Gazette* for November 1882 and reproduced in my work on "Operative Surgery in the Calcutta Medical College Hospital." The parts were rendered and kept aseptic by the free use of a bichloride of mercury lotion (1 to 2000), and the wound was peppered with iodoform and carefully covered with boracic gauze before the outer-dressing, consisting of coarse gauze (bandage cloth) soaked in bichloride and glycerine (1 to 500) was applied. On removal of the outer-dressing, the gauze received a fresh sprinkling of iodo-

form and was left *in situ* for from 10 to 14 days. When removed, the wound was found in full process of aseptic granulation. These measures kept the wound aseptic and free of suppuration in all but a few cases, and in these the putrefaction and suppuration were partial.

The tumours were mostly small and the subjects healthy. The mortality (5 per cent.) was very favourable. The single fatal case was that of an elderly man whose health had been shattered by debauchery, and who succumbed from the shock of the operation and the subsequent reaction, causing prostration and exhaustion.

b. *Elephantiasis of the labia*. Hindu, *æt.* 25. Suffered from double bubo a year ago and both labia began to swell about a month ago. The labia were removed by elliptical incisions, the edges of which were brought together by catgut and healed in 25 days.

2. i. *Lipoma of the thigh*.—Hindu male, *æt.* 18. The tumour of 12 years' growth occupies Scarpa's triangle (right side), displacing the femoral artery outwards. It is about the size of an apple, and freely movable. A straight incision exposed it, and it was easily shelled out. The wound remained aseptic and healed in 31 days.

ii. *Lipoma of the groin*.—Hindu male, *æt.* 24. Large tumour of seven years' duration extending from Poupart's ligament to about 2 inches below the umbilicus on the right side, lobulated and freely movable. It was exposed by a straight incision, and shelled out without difficulty. Wound remained aseptic and healed by first intention. Patient left hospital in 34 days.

3. *Simple Epulis of lower jaw*.—Hindu male, *æt.* 16. The tumour began to grow six months ago and occupies the left alveolus, corresponding to the incisor and canine teeth. History of fall three years ago. Five teeth were extracted and the growth together with the subjacent gum and bone removed. Bleeding stopped by cautery. The wound healed kindly and patient left hospital in 11 days.

4. *Naso-pharyngeal polypus*.—Mahomedan male, *æt.* 21. Noticed a growth in left nostril two years ago. It now protrudes from the nostril which is much expanded and displaces the soft palate forwards. It is very hard, and there is a muco-purulent discharge from the nostril. The nose was slit open, exposing the chamber of the left nasal fossa. The chain ecraseur was passed round the growth and part of it removed. The remainder was avulsed with a pair of necrosis forceps. The fossa was stuffed with boracic lint and the nose carefully stitched. A good deal of blood was lost. The nose healed by first intention and the cavity by granulation. It was regularly washed out with Condy's fluid. A few maggots came out of it for a few days, but they disappeared under the use

of iodoform. Left hospital perfectly well 37 days after the operation.

5. *Cystic tumour of the lower jaw*.—i. Hindu male, *æt.* 26. Tumour commenced seven years ago. Implicates the whole of the right half and the body of the left half of the jaw. Tongue secured by a cord. Lower lip divided in the middle line and the incision carried downwards and to the right over the most prominent part of the mass where the integument was much stretched and thinned. Flaps reflected from outer surface of tumour; jaw divided at level of second molar tooth on left side, and removed by disarticulation on right side. Lip and wound carefully stitched. The lip healed by first intention and most of the wound. Patient left hospital quite recovered 57 days after the operation. Tumour weighed 2 lbs. 2 oz. It was an osteo-cystoma.

ii. Hindu female, *æt.* 40. Tumour of two years' duration, involving the left half of the body of the lower jaw and extending beyond the symphysis to the right side. Two sinuses, the result of recent suppuration, entered the body of the tumour from outside (suppurated cysts). A straight incision was made from the left angle of the mouth, the flaps dissected off and the jaw divided at the level of the 1st bicuspid tooth of the right side and through the angle of the left. The wound was carefully stitched and healed by first intention. Recovery was delayed somewhat by bagging of matter beneath the divided angle which was bare, and a free counter opening had to be made. She left hospital quite well 89 days after the operation. Tumour weighed 1 lb 2 oz. It was an osteo cystoma.

* * Contrary to custom the lip was divided in both these cases. The tumours were very large and the skin considerably thinned. Division of the lip facilitates the dissection, the division of the jaw and the seizure of bleeding points: and if the wound is carefully stitched, no deformity or inconvenience results. A large drainage tube was inserted in both cases into the lower angle of the wound. This fulfils an important purpose by preventing the accumulation of septic material in the floor of the mouth. It also permits more thorough washing out of the wound cavity.

5. *Warty tumour of the penis*.—Hindu, *æt.* 23. The mucous membrane lining the prepuce and covering the glans is covered with a crop of large warts forming a continuous mass, whose base is surrounded by considerable thickening. The growth of the warts followed an attack of gonorrhœa five months ago; the prepuce cannot be retracted and a foul purulent discharge issues from the preputial orifice. The preputial cavity was slit open, and the prepuce entirely removed; the warts were also dissected off the surface of the glans. Some

recurrence took place during the healing of the wound, and a second operation was necessary. Perfect recovery eventually took place. Patient remained in hospital 58 days.

6. *Removal of piles.*—In these three cases the piles were isolated by means of Smith's clamp and removed by strong curved scissors, the cut surface being seared with Paquelin's cautery. The operation was facilitated by cutting the skin and mucous membrane surrounding the pile with scissors before applying the clamp.

A satisfactory result was obtained in all the cases.

(To be continued.)

bromid. and chloral hydras for sleep; ice, mucilage, fluid magnesia, arrowroot, &c. were given to soothe the stomach, oily and fatty substances being avoided.

10th May.—Symptoms nearly the same; but much prostration. Slept last night for about two hours. Treatment—(at day time) potassii bromid. with a drop dose of aconite every three hours. At evening he was seen by the Civil Surgeon and treated with potassii bromid. with small doses of liq. morphiæ every three or four hours.

11th May, 4 a.m.—Extremities cold, pulse soft and weak; heart's sounds were rather rough, urine scanty, high coloured. Abdomen distended with flatus. Urine contained no albumen, but traces of bile. With exception of occasional stupor, the mind was in tact from the beginning to the fatal end. Death occurred at 9 A. M. with symptoms of collapse. Treatment—stimulant mixture every hour.

DACCA,

14th May 1887.

Note by DR. CROMBIE.

When I saw him on the evening of the 10th of May, the irritative symptoms had entirely ceased. There was no vomiting or purging, and little or no pain. There was slight tenderness over the epigastrium, yellow tinging of the conjunctivæ, and the only symptom complained of, was the rapid throbbing pulsation of the heart. I was of opinion that the phosphorus had been absorbed, and the relatives were warned that though the symptoms of gastro-intestinal irritation had passed off, the destructive action of phosphorus on the liver, kidneys and heart were to be looked for, and that death was probable in the manner in which it took place next morning.

Phosphorus poisoning is rare, this being the first case that I have met with.

DACCA,
27th May 1887.

GUN-SHOT WOUND: A MEDICO-LEGAL CASE.

BY APOTHECARY R. M. BLAKER,
Civil Medical Officer of Bogra.

MAKIM KHAN, a small spare built man, Mahomedan, aged about 28, was sent by the police for examination and report on the 23rd November 1886. He had six small regular wounds, two on the right side of the chest, (one about an inch below and to the right of the nipple, the other about an inch still lower down), and four on the inner side of the right arm between the elbow and its middle. On examining the chest, I found air beneath the skin to the extent of

8th May.—At the time of my first visit, he complained of severe pain in the epigastrium, thirst, retching, but no vomiting or purging. Pulse full and frequent. Temperature a little above normal. Amongst other symptoms were restlessness and intense headache. Heart's action much excited.

9th May.—Headache still severe, very restless; pain in the epigastric region continued; slight cramps in hands and feet. Eyes slightly jaundiced. Temperature 101°. Urine copious and high coloured. No nausea or vomiting. Felt uneasy sensations in his bowels and asked to have them moved. No sleep for two or three nights. On pressure there was slight tenderness over the stomach.

Treatment.—Cold lotion to the head, sina-pism to the epigastrium; poultices to the abdomen; Seidlitz powder to purge; potassii