from the ventricular wall, and, almost invariably following the course of the blood-currents, pass into the great arterial trunks leading from the ventricle. The concretion thus running along the main trunk is either tubular in character, or is entirely surrounded by blood increased greatly the size of the blood-wall.

There is yet another condition, in which the deposition, being more slowly carried on and more extended in its character, occurs in the form of a layer, having no one point, but a wide spread surface. In this form of deposition are produced the hollow concretions, that filled a cavity or a vessel, and enclosed in their centres red blood.

Lastly, there is that concretion which undergoes organic development. In all instances of this, the blood, which is, in my opinion, a preceding change in the endocardial membrane. There is injection of the subserous layer, edema, exudation of plastic matter, with rupture of surface, and production of a point on which the fibrous of the free blood finds not only a basis, but a basis directly connected with the endocardial membrane. In process of time, vessels from the broken membrane are thrown out, and, extending through the fibrinous membrane deposited by the blood, furnish it, if the patient live long enough, with the materials for a new and special organic growth, possessing a permanent and independent existence.

To be continued.

Original Communications.

PALLIATIVE TREATMENT OF CANCER.

By Thomas Hunt, Esq., F.R.C.S.

Mr. remarks apply only to those cases of true seirchus in the breast in which there is a hard and moveable tumour, not yet advanced to the stage of ulceration.

One indication in this condition of things is as far as possible to prevent the occurrence of ulceration. I regard this process as chiefly the result of the pressure sustained by the skin and cells beneath it. To prevent this, two hard substances, the one, the patient’s corset, and another hard substance without (the patient’s corset). This pressure is generally so severe not only to give rise to pain, but to effect, first, a congestion of the healthy vessels, and secondly, an absorption of the healthy structure, without being sufficient to absorb (as has been proposed by higher pressure) the cancerous tumour itself. A second indication is, to support the tumour, without undue pressure; and a third, to relieve pain.

All these purposes are easily accomplished, in most cases, by the following expedients:—The whole breast should be allowed to rest on a thick broad compress of cotton wadding. When the tumour is small, or the pendulous chief may be passed, as a sling, between the mamma and the wadding, and tied over the opposite shoulder, one tail of the handkerchief being passed over the clavicle, the other tail over the scapula and mammary parts, and all should be enclosed in a capacious corset, which will then become a comfortable support, instead of acting as a tormenting one. Where the pain has been very severe, I have applied to the skin a belladonna plaster, spread thinly on soft linen. This, by encompassing not only the whole breast, but an inch or two of skin beyond it in all directions, will materially assist in giving comfortable support, and also in allaying the irritability of the nerves. By this local treatment, I have often succeeded in relieving the patient of all pain for months together, and also in preserving the isolation of the tumour, and in many cases diminishing its size.

Together with this local treatment, great attention should also be paid to the bodily health and mental tranquillity of the patient. She should be encouraged to hope that her pains may be much relieved, if not entirely removed; that the disease may probably be checked, or even so far subdued as to become for a very considerable period comparatively harmless and benign. The health should be sustained by a generous but regulated diet; by engaging the patient as much as possible in cheerful society; and lastly, by moderate and frequent exercise in the open air, in a locality where the atmosphere is pure and mild. This will be far, very far, better than confinement in the house, and infinitely better than confinement in the house, and infinitely better than confinement in the house, and infinitely better than confinement in the house.

The patient had been advised to have the tumour removed; but she strongly objected to the operation, and had resigned herself to despair. When I last saw her, her spirits were so good that I was persuaded one could have convinced her that the tumour was malignant.

CASE II. Miss ——, aged 24, residing on a healthy eminence in the country, had observed for several months a tumour on the right mamma, below and to the right of the nipple. She was a fine handsome girl; and nothing but the extreme hardness of the tumour, coupled with failing health, could have convinced me that she was the subject of cancer.

The tumour was of the size of her bantam’s egg, of oval figure, but irregular, very hard. The mamma was swollen and tender; the axillary glands were not so enlarged, but very tender, and somewhat painful. The pain in the tumour was often intense and lancinating. The nipple was normal; the skin was slightly puckered over the tumour, which, although buried in a highly developed mamma, was in some degree adherent to the integuments.

The health was considerably impaired. The bowels were very much constipated, and the catamenia very irregular, sometimes profuse, and sometimes scanty. There was also severe leucorrhoea, with pelvic pains and general uterine distress; as well as a falling appetite, and a constant taste for sweets and foreign food.

The patient had wasted considerably during the last three months, and her spirits were wretched.

March 12th, 1858. The breast was enveloped in a belladonna plaster, supported by a bandage with a wide flat sling. She was directed to regulate the bowels by pills of colocynthis, aloes, and rhubarb; and to take the chlorides of iron and arsenic, as
in the former case. She was ordered a full diet, with stout or porridge; directed to take exercise in the open air; and encouraged to hope for a speedy amendment. In this she was not disappointed, for not less than a fortnight her health had considerably improved.

May 5th. She was much more free from pain, and better every way in health and spirits. The leucorrhoeal discharge was much reduced; the catamenia had become regular and normal. The tumour felt more loose and moveable, and less irregular on its surface; and the puckering of the skin was less obvious. The pain and tenderness in the axilla were quite gone; and the other symptoms, of which she complained, however, of headache, and thought the iron did not quite agree with her. The arsenic and aperient pills were continued, without the iron; and the local treatment as before. Fowler's solution, in doses of four minim, was afterwards substituted for the chloride, which began to nauseate a little.

July 19th. She was better every way; appetite good; was gaining flesh, and was in high spirits. The tumour was decidedly reduced in size, and almost free from pain. The treatment was continued.

From this period I saw nothing of the patient for five months; and, as I had never revealed to her the malignant character of the tumour, she expected she was recovering altogether. Accordingly, she visited some friends at a distance, neglected her medicine, and took no heed to the support of the breast.

Dec. 12th. The tumour was larger and more painful; the catamenia were too frequent; leucorrhoea was constant; and there had been a discharge of blood from the bowels, which were constipated. The appetite was sickle and capricious, and the bowels and bladder troubled. The arsenic, iron, and purgatives, were ordered to be resumed.

I have not seen the patient since the last date; but the relapse of all the bad symptoms, on her neglecting the treatment, is quite as instructive as the benefit previously derived from it.

I am quite aware that it has been suggested by a microscopical pathologist of repute, whose name I forget, that inasmuch as a cancer may be traced to growth, the application of warm cataplasm is objectionable, as tending to the more rapid development and growth of the parasite; but a few such facts as the above surely afford a sufficient refutation of this theory. Variations of temperature are great hindrances to healthy action in local disease of every kind; and besides that the cotton wadding serves as a soft cushion, it probably exercises a salutary influence by regulating the temperature of the parts.

Alfred Place, Bedford Square, January 1860.

CASE OF TRAUMATIC EMPYEMA OF SIXTEEN MONTHS STANDING, WITH FISTULE: TREATED SUCCESSFULLY.

By ALBERT G. WALTER, Surgeon, Pittsburgh, Pennsylvania, United States.

JOHN O'NEAL, aged 32 years, of decidedly strumous diathesis, with fair skin, red hair, by occupation a river-man, had enjoyed excellent health up to the period of his receipt of the following injury. Whilst in discharge of his duties as mate on a Mississippi river steamer, in a dispute with one of the crew, he was stabbed with a broad bladed knife under the left arm, the knife entering the chest between the eighth and ninth ribs, an inch posterior to the median line. Profuse external bleeding from the wound was stopped by tamponing the costal artery followed, which was again attempted by closing the wound with stitches. Dyspnœa, cough, with bloody sputa and high inflammatory fever, ensued, terminating in empyema. On the ninth day after the injury, an abscess pus forming anterior to the original wound (which then was closed). This was opened by incision, giving vent to a large quantity of pus. A month later, the wound itself opened spontaneously; from both openings, purulent matter was freely discharged; four or five weeks, he bled, and was forced to go about; but the dyspnœa, chills, and night-sweats, with loss of appetite and strength, too plainly indicated the severe irritation under which his system was suffering. Some months later, for six or seven months, we have been hearing of him, but were unable to close his discharge, because it received, as the openings, a sile greater quantity of highly offensive greenish

matter. Discouraged by the fruitless efforts of his medical adviser, his means exhausted in the vain endeavour to find relief, he returned to his home near this city, and applied for assistance into my hospital.

His appearance was that of a person in confirmed phthisis; the shoulders stooped; respiration was short and hurried; the pulse was feeble and rapid; he had frequent attacks of dyspnœa, which he called convulsion of the heart; and there were irregular paroxysms of fever, with night sweats. The hands and feet were moist or clammy; emaciation was extreme; he had a short teazling cough, with purulent sputa, loss of appe- tite, and loss of weight. He had frequent attacks of chest pain, with a sense of oppression, followed by a feeling of a stream opening above the splinted, which had appeared some months ago.

Under all the circumstances, especially the condition of the pleural sac, where issued from fully two pints of pus daily, the removal of the pus, and the application of greenish powder to the pleural cavity, to reduce the collection of pus, and the use of the stomach, could not be expected. A free crucial incision was made through the skin, fascia, and muscles; the flaps were separated, and an inch of the eighth rib was resected by pilers. This was hardly accomplished before a quantity of very offensive matter escaped, followed by masses of putrid, putrefying and putrid lungs, which were removed by the forceps, but which proved to be the fibre of coagulated blood, which, acting as a foreign body, had kept up the suppuration. The pleural sac was washed out with water, and carefully explored with the finger, which, how- ever, could not reach the pleura pulmonalis, as the lung was forced upwards and backwards by the long continued compressive force of effused blood and pus. The portion of rib removed exhibited increased calcification with considerable hydropy, as the result of the prolonged inflammatory action in the pleura. But little blood was lost during the operation; the expiration was, however, very great—the after effect of chloroform requiring a free use of stimulants. The patient was much improved. His countenance had cleared, his moistness lessened, and his hearing and, after a few weeks, he left the hospital free from symptoms, and has continued to improve steadily.

For a time the improvement was well marked. Hectic dis- appeared; the appetite and strength returned; respiration had become more free from oppression; the lost weight was regained, and the thorax had sunk in front and laterally; the discharge had gradually diminished in quantity, and improved in quality. Still the pleura entered the cavity freely. Tincture of iodine injections were again resumed, after previously washing out the sac; but these had to be discontinued, as they caused chills and irritating fever.

The condition of the patient, having remained stationary for some time, suddenly and without any evident exterior cause assumed an unfavourable aspect. An increased discharge of a more offensive matter appeared, with fever, night-sweats, and anorexia; the abscess above the empyema cavity had evidently become much diminished in size, yet, the original cause appearing to continue, on February 11th, 1858, a free opening in the chest was made by resecting two inches of the eighth and ninth ribs. The interior of the abscess being thus