rate of growth or appearance from the small-pox vesicle resulting from inoculation) will get the start of the small-pox infection, and thus have the same effect in mitigating the disease as inoculation with the matter of small-pox generally has.

When, therefore, small-pox occurs in a house, immediate vaccination may be recommended to all the inmates who can be supposed to be susceptible of small-pox infection, not only to prevent future infection from small-pox, but also with a reasonable expectation of mitigating the disease, should infection have already taken place.

By parity of reasoning, the mitigation known to be effected by inoculation in the small-pox, *so-called*, of sheep, would imply, what has not that I know been put to proof, that the disease in these animals cannot occur in the same individual twice.

Lettsomian Lectures

ON

THE SURGICAL DISEASES OF CHILDREN.

DELIVERED BEFORE THE MEDICAL SOCIETY OF LONDON.

BY

THOMAS BRYANT, F.R.C.S.,

ASSISTANT-SURGEON TO GUY'S HOSPITAL.

LECTURE II. (*Continued.*)

DIFFERENCES BETWEEN THE SURGICAL AFFECTIONS OF THE CIRCULATORY SYSTEM IN THE CHILD AND ADULT.

THE differences between the surgical affections of the circulatory system of the child and adult are the next to which our attention must be directed; and the subject of *nævus* perhaps claims our first notice. That it is an affection of young life every one will admit; and I imagine that few will deny that it is a disease of the vascular system. Whether it be a new growth altogether, allied to the erectile tumours, or a simple increase or multiplication of normal capillary tissue, may be open to dispute; but I am disposed to explain the appearance of *nævi* by this last suggestion, and to suppose them produced by a multiplication or growth of capillary tissues; the formative and developmental forces, which are so active in young life, taking a wrong path, and directing their power simply to the repetition and growth of capillary tissue, instead of the healthy development of the natural body. This misdirected force may also continue its action for some months; but it has always a tendency to cease, for it is only during the first few months of life that *nævi* show any rapid signs of increase.

The subsequent life of *nævi* tend also to bear out the truth of this suggestion. In many cases, they continue to grow for months with varied degrees of rapidity, and then suddenly cease; remaining either in a stationary condition, or, as is more frequently the case, undergoing a degenerating process. In some instances, this degeneration of the growth commences *in utero*; when, at birth, decaying or so-called ulcerating *nævi* will be observed; one and all of these *nævi*, at different times of their existence, ceasing to increase; and

one and all, at different epochs of their life, beginning to degenerate; the growing power after a time ceasing to manifest itself, as the developmental power had previously done. Obedient also to the physiological law which is in force during all ages—more particularly during young life—and which shows itself by the tendency that all parts of the body possess to return to their normal and healthy condition, so these *nævi* degenerate and waste, and cease to trouble except by their deformity.

Nævus is, therefore, essentially a disease, or rather a growth, of young life; it makes its appearance either at birth or a few weeks subsequently, and is found only when growth and development are the most active; and it is to be explained by an excess in the growth of capillary tissue, and a want of natural development. The treatment of these cases will next claim our attention.

Treatment of Nævi. It may with some truth be stated that, unless a *nævus* be so situated as to be an eye-sore or an inconvenience, and unless it show positive evidence of its tendency to rapid increase, there is no necessity for any operative interference; it will to a certainty, after a time, cease to grow, and will also to a certainty begin to degenerate or waste; and under such circumstances, in a large proportion of cases, it is hardly necessary to interfere. Should, however, the *nævus* be so situated that it is or will be either an inconvenience or a deformity; or should it grow so rapidly as to threaten to become either, something must be done; and this something is to be determined by the nature of the *nævus* and of the tissue in which it is placed.

It may involve either the skin alone, or the cellular tissue alone; or it may involve both.

In the first class, in which the skin alone is involved, the *nævus* may readily be destroyed by means of external applications, such as caustics, nitric or sulphuric acids, potassa fusa, chloride of zinc, tartarised antimony, etc. The caustic must be applied freely, and without fear; and one application should be amply sufficient. In this *simple cutaneous* form, external applications are to be employed, and in it alone; in all other forms they are absolutely useless.

In the purely *subcutaneous* form, removal by the subcutaneous ligature is doubtless the best practice. The whole *nævus* must be freely surrounded, and completely strangulated; any surgical knot which will carry out this object answering the purpose.

In the *mixed* variety, excision of the growth, when it can be performed, is to be recommended; but if this plan be inapplicable, the application of a strong ligature, including the *nævus* and integument, is to be followed. Excision is the best practice when the *nævus* is pendulous, or when it can be previously isolated from the parts beneath; a clamp having been applied along the line of section, to prevent hæmorrhage. In several instances, I have excised the *nævus*; having previously inserted some pins beneath the growth, and cut upon them, keeping the pins as points round which a ligature might be applied, and by which the edges might be subsequently brought together. The operation of excision is doubtless one of risk, and much care must be taken that the *nævus* itself be not touched; for this purpose, the line of incision should be far from its margin. It is only in select cases, however, that excision is to be per-

formed. If the thickness of the lips be the part involved, such a practice is the best; and in two cases, one of the upper and one of the lower lip, I have carried out this practice with perfect success; the edges of the **V** incision having been brought together after its removal by a fine suture. In the majority of cases, however, of the mixed variety, the ligature should be preferred.

It occasionally happens that in some instances none of these plans of treatment appear applicable. The nævus may be too diffused, or too close to some important part; and, under such circumstances, some other plan of treatment is to be employed.

In the subcutaneous or in the mixed variety, the treatment by injection of the perchloride of iron is a good one, although it is by no means generally successful. When it answers, however, it succeeds well; and it is, therefore, worthy of a fair trial.

The treatment of a diffused nævus by means of setons is another plan of treatment, and it is one to which I must confess to be very partial. It has proved of great value in my hands; and I give, therefore, a preference to it over injection. I could, if it were necessary, quote numerous instances in which success has followed the practice; but the fact of its success is all that requires to be established.

If the nævus be large, several thick setons, passed through the centre of the growth, may be inserted; but, as a rule, one or two amply suffice. By these means sufficient inflammatory action is produced to close temporarily the capillary tissues, and, by subsequent contraction, permanently to effect a cure.

[To be continued.]

Illustrations

OF

HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

WEST LONDON HOSPITAL.

CASES OF DISEASE OF THE THYRO-HYOID ARTICULATION AND LIGAMENT; WITH CLINICAL REMARKS.

Under the care of G. D. GIBB, M.D.

CASE I. *Secondary Syphilitic Eruption, with Sore Throat and Inflammation of the Right Thyro-hyoid Ligament.* Caroline B., aged 31, married, no children, was admitted Sept. 4th, 1862, with a well marked papular eruption over the body, face, neck, and four extremities. There were dark purple redness and scattered ulceration of the fauces, with dysphagia and thick speech. The history of syphilitic inoculation was clearly made out; but the patient had no knowledge of what her complaint was until told. Chancrous ulcers were present on the labia. Under the use of the bromide of ammonium the eruption gradually faded away; the labial ulcers healed by the application of black wash; and the throat much improved with a gargle of bichloride of mercury.

On October 16th, a lump formed on the right side of the neck, which increased in size until it was as large as an elongated Barcelona nut; it was hard, painful, and tender to the touch; and, on examination, proved to be inflammation of the thyro-hyoid ligament. A couple of leeches were applied, and afterwards a small blister; and small doses of iodide of potassium, tincture of iodine, and bichloride of mercury, were given internally.

Dysphagia was a marked symptom for a few days, with a pricking sensation running up to the ear; but the swelling gradually subsided, and a short cord was left, about one-third of the usual length of the ligament, between the cornua of the hyoid bone and the thyroid cartilage.

By November 20th, the induration was almost quite gone, the eruption had died away, the throat was well, and she left the hospital.

CASE II. *Tuberculous Ulceration of the Larynx in a Case of Advanced Phthisis; Threatened Rupture of the Right Thyro-hyoid Ligament.* Charlotte L., aged 38, mother of a family, was admitted on July 14th, 1862, for chest-disease of eighteen months duration. Cavities were present in the upper part of the left lung, and tuberculosis of the right lung in the first and second stages. All the symptoms of the disease in its advanced form were present. Hoarseness, dysphonia, and partial aphonia had been present for seven months. These latter depended upon minute ulcers of the mucous membrane of the interior of the larynx, and on the destruction of a portion of the right vocal cord, as seen by the laryngoscope.

Under treatment, the general health improved, and the laryngeal symptoms mainly subsided—so much so that the voice was stronger and louder, and not painful. Glycerine was given twice a-day, and in her pectoral mixture half-drachm doses of tincture of sanguinaria afforded great relief.

At the latter end of October, she suddenly became worse; pain was present on the right side of the neck in swallowing, the result of inflammation of the thyro-hyoid articulation; the ligament had become shortened, so that the cartilage and bone were nearly in contact. Pain and soreness were prominent symptoms for some weeks, necessitating a second swallow to get down food.

She got better, and remained so until some weeks ago, when the pain was so severe and the dysphagia so extreme, that fears were entertained of rupture of the ligament from ulceration. But, although she was a great sufferer, her misery was not increased by this occurring before death, which finally took place.

CASE III. *Bronchocele, dislocating the Thyroid Cartilage to the Left Side; Formation of a Thyro-hyoid Joint on that Side.* Mary Q., aged 54, was admitted on August 14th, 1862. She had had bronchocele ten years, following an injury to the neck. There was now a firm and tense globular swelling occupying the right side and middle of the neck, which had pushed the thyroid cartilage to the left side. The throat was healthy; but in swallowing there was little motion of the parts, and no pain.

Soreness was complained of on the left side, at the junction of the cornua of the thyroid cartilage and hyoid bone. Here they were found to be in contact; and a distinct capsular joint had formed, with obliteration of the ligament. Dyspnoea was present at times. Her health was bad. The tumour was not increasing.

CASE IV. *Diphtheria supervening on Syphilitic Angina, with Acute Inflammation of the Left Thyro-hyoid Ligament.* Michael M., aged 20, was admitted on Sept. 15th, 1862. He had been suffering from syphilitic sore throat, with enlarged tonsils and parotid glands, when diphtheria supervened, and the pharynx was coated with a white membranous exudation. He had a dark copper-coloured papular eruption in different parts of the body. He slowly improved under treatment; but at the end of October he complained of acute pain and swelling in the left side of the neck in the situation of the thyro-hyoid ligament, where a tumour could be felt as large as a large bean. This continued sore for many weeks, but finally disappeared; yet the general health was much prostrated from the combination of the two forms of sore throat.

[To be continued.]