the Crimean fever are liable to attacks of a similar nature, sometimes so severe and so easily brought on, as to incapacitate the sufferers from performing their military duties. An officer, who laboured under this form of neuralgia in a moderate degree, described it to me as "a sense of dead weight at the heart," attended with a feeling of exhaustion, and some failure of pulse, to relieve which he was obliged to take ether or wine; it came on every second day or thereabouts, and was especially induced by any painful emotion or agitation, but not by cheerful exercise. Dr. Macculloch has noticed particularly *neuralgia of the heart* manifesting itself by palpitation, and also by paralysis more or less severe. In one case of this kind "the suffering was extreme, even frightful, as the sensation was always that of imminent or immediate death, and of death which nothing but a strong exertion both of the mind and body could have prevented." I would recommend his observations very strongly to the careful perusal of all who may feel interested in this subject. (*Vide* vol. i., pp. 354—366.)

Southwick-place, Hyde-park, Oct. 1855.

REMARKS ON THE

PATHOLOGY OF A CASE OF DISEASE OF THE SYNOVIAL MEMBRANES AND CARTILAGES OF THE ANKLE AND FOOT.

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A LABOURER sprained his right ankle severely, recovered partially, but never regained perfect freedom of motion. Many months elapsed, and the tender joint began to swell and be painful. In spite of treatment, this tenderness increased, and the whole foot became enlarged. Suppuration in the ankle-joint occurred, and the offending member was removed.

There were many points of interest connected with the disease: such as the cause of the outbreak of the phenomena so long after the sprain had become of secondary importance to the man; the nature of the changes induced in the ankle and in the tarsal articulations, and their histology. Dissection proved that the sprain had been the prime mover in the disease of the ankle-joint; there was disease of the ligaments, the cartilages were wanting in many places, and a creamy pus covered the inside of the joint. But the articulation between the astragalus and calcis, and that between the astragalus and scaphoid, did not present these appearances; there was no suppuration, no decrease of the ligaments, and the synovial membranes were hypertrophied, and apparently continued nearly over the cartilages. The concave articulating facet of the scaphoid presented the disease, which was common to the tarsal articulations, in the most perfect form. The glistening cartilage was only visible in the centre of the facet; the rest of it was hidden by a "growth" from the edge of the synovial membrane. The margin of this growth was thin and semi-transparent, but where it joined the synovial membrane, it was dense, streaked with large capillaries, and intimately adherent to the cartilage beneath. The consistence of the synovial membrane itself was semi-cartilaginous; it was softer on the surface, and highly injected. The cartilage beneath the growth was opaque and rough generally, but in many places vascular offshoots pushed through the thin cartilage, and thus produced a vascular connexion between the haversian systems of the bone and the adventitious product of the synovial membrane. Drs. Goodsir and Brinton have described this state of things exactly. I endeavoured to determine—first, the origin of the "growth," its histology, and its effect upon the subjacent cartilage; secondly, the microscopic anatomy of the diseased synovial membrane; thirdly, whether or no there might be concurrent disease of the cartilage.

The thin, semi-transparent edge of the growth exhibited, under a power of thirty diameters, splendid specimens of the development of capillaries from the loops of the minute vessels peculiar to the denser portion of the tissue; also, under a higher power, faint indications of cells, many dark molecules, and a few refractile globules. This edge could be lifted off the cartilage with the handle of the scalpel. The denser portion of the growth consisted of bloodvessels in loops, (each loop springing from the convexity of one or two nearer the main vessels,) of much white fibrous tissue, of a certain portion of tissue nearly homogeneous, of areolar tissue, and, superficially, of a layer of large globular cells, which, when ruptured, flattened out considerably. Looped vessels and areolar tissue

dipped down into the erosions in the cartilage, and could be traced in many spots down to the soft cancellated bone.

Close to the margin of the cartilage, the tortuous capillaries of the true synovial tissue could be seen with the low power; the loops of the adventitious tissue were continuous with them, and the histologic elements of the synovial membrane, hypertrophied as they were, and mixed with new appearances, could be traced continuously into the growth covering the cartilage,—instancing the law of continuity as regards adventitious growths. The synovial membrane was only to be distinguished from this offshoot by its long and tortuous capillary system; otherwise, in structure, they were identical. The most interesting question was, as to the state of the cartilage.

The central, uncovered portion was less opaque than the rest. With a power of 200 diameters, the inter-cellular portion was seen to be intensely granular; the cells were enlarged, and contained many refractile granules; and the knife detected a loss of crispness. The other portions presented the same appearances, with the following additions: the cells in many places had coalesced, the inter-cellular tissue having been absorbed; these cells were many times larger than healthy cartilage cells, and were filled with refractile globules, granules, and secondary cells. Near the erosions, this destruction of the inter-cellular structure was most marked; and where any portion was left, the infiltration of molecules, dark in their outline, rendered it anything but transparent and homogeneous. Below, the bone was soft and dark.

The erosion of the cartilage can hardly be ascribed to the influence of the vascular tissue above it alone; intrinsic changes, fatty degeneration and softening, had been contemporaneous with the evolution of the adventitious growth from the synovial membrane. The disease was, to all appearance, Brodie's pulpy degeneration, accompanied by the erosive process described by Goodsir; and to these was added a concurrent disease of the cartilage; and the common origin of all must be admitted.

From subsequent observations, I am firmly impressed that the bloodvessels of the opposed adventitious growths do, under favourable circumstances, anastomose, and when this is perfect, the vascular systems of the opposed bones are united by this strange medium; ankylosis may then ensue.

October, 1855.

ON

DISEASES OF THE INTERNAL SURFACE OF THE BODY AND FUNDUS OF THE WOMB.

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BELIEVING, as I do, that the attention of the profession has been of late years directed far too exclusively to affections of the os and cervix uteri, and that grave and exhausting diseases of the body and fundus have been consequently overlooked, I propose in this paper to make some practical observations on the latter, founded on cases which have resisted in other hands the usual treatment for the former. It must have occurred to many practitioners to have been from time to time consulted by patients, whose symptoms evidently point to the womb, but who say that they have already been treated for that organ, and have been pronounced cured, and who, though not suffering to the same amount that they did before treatment, are yet far from well, and still feel that there is *a something* to be removed. They struggle against what they are assured is a mere morbid feeling, but with very little success; and though positively told that there now remains nothing but the languor of convalescence, and that change of air, tonics, and a determined resolution to feel well, will complete the recovery, they, on the contrary, grow gradually worse till they are again the same as they were before any treatment, and with the mind considerably more depressed and despondent. Being induced to submit again to an examination, the newly-consulted practitioner, if he confines himself to the os and cervix uteri, probably finds the statement of the patient as to the previous treatment literally correct; there is, it may be, no ulceration, no congestion, no relaxation of these parts; and if he pursue his investigation no further, the patient is condemned again to change, tonics, &c., and not improbably to years of misery, all the more intolerable that it is regarded as fanciful, and *she* as a hypochondriac. If, on the contrary, he examine the body of the womb *externally* by compressing it between the vagina and the abdominal wall, and *internally* by the uterine bougie, and by dilatation so as to admit of his finger being introduced