

Portions (after hardening in alcohol) taken with the sclerotic from the external region of the tumor and thin sections cut and tinted with hæmatoxylin show very well the structure of the growth and its relation to the surrounding parts.

The sclerotic was nowhere affected, nor did it appear at all atrophied over the region of the growth. In one or two sections a slight increase in the cellular elements along the course of the vessels was observed, but this condition was by no means general. Immediately within this tunic was a layer about half the thickness of the sclerotic, characterized by the presence of numerous long spindle-shaped pigment corpuscles, and others of a more irregular form. A delicate connective tissue, with innumerable blood vessels composed the matrix, so that this may be regarded as the external layer of the choroid very slightly altered. In some sections it would appear that the tumor involved the whole of the outer layer of the choroid, for the round sarcoma cells abutted directly upon the sclerotic.

By a gradual transition we pass to the region of the tumor with abundant round cells closely aggregated together and very irregularly pigmented. At the most external part the fibrous stroma of the choroid is infiltrated to such a degree with cellular elements, that in places quite an alveolar structure is given to the growth. In the deeper portions this is lost, and the cells appear crowded together without any intercellular tissue. Still further towards the centre, a well developed matrix, granular in character, is seen, surrounding each cell. In thin sections many of these cells fall out and leave the connective tissue frame-work as an open net work in which here and there a larger cell is retained. Pigmented cells occur scattered through the sections either singly or collected in small clusters. A few hæmorrhages are seen towards the centre of the growth. The portion of the retina lying upon the tumor was carefully removed, and on examination proved perfectly healthy. Along the course of some of the vessels, minute extravasations were met with and groups of pigment corpuscles were not uncommon. These latter were rather larger than the colorless blood corpuscles, and in one or two localities were observed to contain red blood corpuscles in various stages of transformation into melanin. After removal of the retina a thin dark membrane could be stripped from the surface of the growth, which was found to be the innermost layer of the choroid, consisting of regularly polygonal pigmented cells beneath which the usual stellate

pigment corpuscles existed in abundance so that in no point had the tumour perforated the surface of the choroid. Sections taken from the smaller tumour at the point of junction with the healthy tissues are very interesting, showing how the growth has originated from the central and inner region of the choroid, and in its onward growth split it into two layers, one of which, the external, remains in contact with the sclerotic, while the other invests the surface of the tumour. The advancing area of the growth in these sections is represented by a wedge-shaped portion, composed of numerous round cells, and at its periphery several large vessels can be seen.

37 BEAVER HALL TERRACE,
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LECTURE ON SOFTENING OF THE BRAIN.

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We very frequently hear the expression "softening of the brain." It is often used by educated patients; for many people who simply suffer slight and often but temporary nervous exhaustion think, always erroneously, that they have "softening," or are going to have it. It is really an expression of pathological application, but just as the symptomatic word "apoplexy" has come to have a pathological meaning (effusion of blood), so the pathological term "softening" has come—so, at least, it appears to me—to be used, even by some medical men, as a name for a certain rude clinical grouping of symptoms in cases in which there really is no softening. This use of the term is to be deprecated. Let me mention the symptoms of cases wrongly called "cases of softening." We see patients who have become excitable, irritable in temper, and desponding; they have found that their attention easily fails, and that they cannot do their accustomed work; they usually sleep badly; they have often what they call headache, but is mostly not an ordinary headache, either in kind or in position; it is a feeling of pressure, or sometimes of burning, and its seat is the vertex or the back of the head; there is very often, indeed, a disagreeable feeling at the occiput and in the upper parts of the spine, more distressing than pain—an intolerable physical feeling; the queer feeling in the spine is often intermittent, and frequently comes on slowly with great depression of spirits. Altogether there is a strange mixture of "mental" and "physical" symptoms. Recognizing the group of symptoms I have mentioned as a fair clinical entity deserving particularly careful study, I do not see the evidence for the diagnosis that softening of the brain is the