

the spinal canal, the plexus of veins covering the *aura mater* contained more than the normal quantity of dark blood, the *aura mater* itself presented a normal appearance; a longitudinal incision was made through it, permitting the escape of a small quantity of cerebro-spinal fluid. On passing the finger along the cord it was felt to be of slightly softer consistency between the origin of the first and third dorsal nerves; below that firm: above not quite so firm as normal, and slightly enlarged opposite sixth cervical nerve; *pia mater* congested for the whole length of chord. The spinal nerves were now severed external to the *aura mater*; the cord and its membranes divided immediately below *medulla* and removed *en masse*. In the median line of the posterior surface, between the origin of the fifth and sixth cervical nerves, a bluish-black spot, about the size of a pin head, was observed lying beneath the *pia mater*, which is perfectly intact. On making a transverse incision through this spot, the knife cuts through a dark red clot of a caseous consistence, which at this point is twelve by five millimetres in transverse diameter, the white substance of the cord forming a thin, ragged wall around it, except at this small spot, which is seen superficially. Transverse incisions were made through the substance of cord, one centimetre apart, along its entire length; on examining these cut ends, the clot can be traced with the naked eye as far down as the fourth dorsal nerve, and upward to the second cervical, but that portion between the fifth and eighth cervicals is somewhat cone-shaped, the larger extremity of the cone being opposite the origin of the fifth cervical nerve, where it is twelve by five millimetres in diameter, dwindling down to about two millimetres in diameter opposite eighth cervical nerve, below which it is continued as a mere trace to lower limits first mentioned; at lower fibres of origin of fifth cervical it becomes suddenly smaller (1.5 millimetres in diameter), gradually diminishing in size to upper limit first mentioned. The clot occupies the centre of the cord, and where small enough appears to the naked eye to be limited to the grey matter. The various sections present a pale appearance, except through the clot, which is of a chocolate colour. In the softened portion, the

cord swells slightly above the edges of the cut surface.

For microscopical examination, sections were taken in the fresh state, and also after hardening in bichromate of ammonia. Sections were made in a freezing microtome, stained with eosine and hæmatoxylin, and mounted in damar. Sections for examination were taken from the cervical, dorsal, and lumbar regions of the cord. The sections from the cervical region were but very slightly increased in vascularity.

On examining with a hand lens sections opposite origin of fourth cervical nerve, the clot, which is here a little over one millimetre in diameter, is seen to occupy the whole of the grey commissure extending on both sides almost, but not quite, to the lateral columns, and nearly as far as the ganglion-cells of the anterior cornua; it does not invade the white commissure, but encroaches slightly on the posterior columns lower down, considerably so. In all the sections made by me of this portion of the cord, on examining with a higher power the anterior cornua are not at all encroached upon by clot, and are but little increased in vascularity; indeed, the vascularity in this portion of cord is very much less than in any sections of the dorsal or lumbar region.

The white columns in some of these sections contain numerous corpora amylacea, which are especially abundant in the external zone of the most posterior portion of the antero-lateral column; the posterior columns contain a few much smaller corpora.

Several sections of different portions of the dorsal and lumbar region were also examined, in all of which the vascularity was much increased, the upper dorsal portion being much the most vascular, many of its vessels having aneurismal dilatations and several of the sections showing capillary extravasations—these dilatations and extravasations being seen only in the grey matter; the vascularity of the white substance, although much increased, was not nearly so much so, relatively to normal, as that of the grey matter; the central veins of the grey matter have their coats very much thickened and in a state of corpuscular degeneration. The vascularity of the grey matter in the vicinity of the ganglion-cells of the posterior cornua of the superior dorsal region is very much greater than in the anterior cornua. The