exposed a pellucid membranous bag (the valvula Vieussensii?), distended by a clear fluid, having the posterior half overlapped by a highly vascular and pulpy mass of brain, which retained a sufficient amount of organization and arrangement of the cerebral matter peculiar to the cerebellum to indicate that it was that organ in an abnormal condition and position. Upon the accidental rupture of this membranous bag, (the fourth ventricle?), a pale-straw-coloured serum, in quantity seven or eight ounces, escaped, and the hemispheres of the brain immediately shrank in size, losing their upward convexity, and assuming a downward curve in their outline. The falx major was next removed from its connexions, the hemispheres sliced off upon a level with the corpus callosum, and the centrum ovale exposed. The lateral ventricles were opened, and found degenerated with serum, of which thirty-six ounces were collected altogether. On removing the mass of brain from the base of the cranium, the tentorium on the left side was found to be obliterated, and the left posterior lobe of the cerebrum was resting upon that part of the os occipitis which is the normal site of the left lobe of the cerebellum. On the left side, the tentorium was *in situ*, supporting the right posterior lobe of the cerebrum. On removing it, an irregular opening, of about half an inch in diameter was discovered in the os occipitis, immediately below the right lateral sinus, and a little to the right of the vertical median line of the bone. On removing a triangular portion of the os occipitis, the apex of the triangle being at the abnormal aperture, the dura mater was traced passing through it, together with what appeared to be the crura cerebelli, after the manner of an intestinal hernia. A soft white mass of cerebral matter was resting upon the os occipitis near to the opening, which was presumed to be the medulla oblongata, dragged upward from its natural situation. The spinal canal was not inspected.

The softened state of the entire cerebral mass, as well as the displacement of the cerebellum and its connexions, prevented the examination being as critical with respect to the relative position of organs as might have been desired; but I trust that the above imperfect sketch of the after-death appearances will form an important addition to the history of this very remarkable and highly interesting case of a rare disease.

Guildford, Sept. 1859.

ON A CASE OF

INTRA-OCULAR HÆMORRHAGE

CONSECUTIVE TO THE

OPERATION FOR CATARACT BY EXTRACTION.

By JAMES G. HILDIGE, Esq., F.R.C.S.

THIS accident has been passed over in silence by the greater number of writers on ophthalmology, partly on account of the rareness of its occurrence, and partly, as Mr. White Cooper remarks, because surgeons do not like to publish cases which terminate unsuccessfully. The details of the following case are somewhat similar to some of those recently published in the *Gazette des Hôpitaux* by Dr. Rivaud-Landrau.

Mary H—, aged sixty-five, widow, applied at the Eye Dispensary, Mecklenburgh-street, affected with complete lenticular cataract of both eyes. As the retinae were perfectly sound, and the patient's bodily health good, with the exception of slight rheumatic pains, I determined on operating on the left eye by extraction. The lens, which was hard and of a light-brownish colour, was extracted without the slightest difficulty, and scarcely a particle of vitreous humour escaped during the operation. It appeared, however, that the friends of the patient had given her a draught of porter previous to the operation, without my knowledge; and about an hour after I had left her, nausea and vomiting set in, a considerable quantity of vitreous humour was evacuated, and when I saw her, the flap of the cornea was protruding between the eyelids, and a portion of the bed-linen was saturated with blood, the space between the lips of the wound being filled by a mass of vitreous humour. Notwithstanding the application of cold lotions, cupping by means of Hurtleoup's artificial leech, &c., the hæmorrhage continued for upwards of twenty-four hours, and the patient became so prostrated, that I proposed extirpation of the eye as the only means of arresting the flow of blood. This, however, her friends would not hear of, and the application of cold lotions was continued, her strength being at the same time supported by strong beef-tea, wine, &c. The hæmor-

rhage was eventually arrested by this treatment, but considerable inflammation of the eyeball followed. At the end of three weeks, the patient had partially recovered her strength; the eyeball was, however, atrophied, and vision completely destroyed.

Rivaud-Landrau states that he has only met with this accident four times in two thousand cases of extraction of cataract. In two of these cases, he attributes the hæmorrhage to the escape of a considerable portion of the vitreous humour during the operation; and in the remaining two, it was caused by a blow on the eye twenty-four hours after the operation.

"What are the phenomena," he asks, "which present themselves in the globe of the eye when a portion of the vitreous humour is evacuated?" During this movement the ocular muscles contract spasmodically, which produces minute shocks on the eyeball; the portion of vitreous humour which remains in the deeper part of the globe executes a forced movement forwards, in order to fill up the vacuum. The vitreous humour, in being projected forwards, is detached forcibly from the chorioidea; and it is in this manner that the rupture of the minute sanguineous vessels which wind about the cells of the hyaloid membrane, and radiate from the chorioidea towards them, is produced. Intra-ocular hæmorrhage is the immediate result of the rupture of the vessels during the detachment of the vitreous humour from the chorioidea.

Mr. White Cooper, on the other hand, maintains that the detachment of the vitreous humour, instead of being the cause of the hæmorrhage, is merely the result of it. According to him, it is the accumulation of blood behind the vitreous humour which, in pushing the latter before it, produces the detachment. In fact, Rivaud-Landrau regards as the principal cause of the hæmorrhage what White Cooper considers as merely the effect of it.

In four cases of extraction of cataract at the Ophthalmic Hospital, Moorfields, in which this complication occurred, the eye was extirpated in order to arrest the hæmorrhage; and on dissection a coagulum of blood was found in each case between the sclerotic and choroid coats, the choroid and retina being pushed forwards into the vitreous humour. This would speak rather in favour of Mr. White Cooper's theory.

In a recent article in the *Giornale d'Oftalmologia Italiano*,* Dr. Olioli proposes digital compression of the carotid artery on the side corresponding with that of the hæmorrhage, as a means of arresting it, instead of resorting to extirpation of the eye. Although he has not had an opportunity of proving the efficacy of this treatment, yet he cites a case of aneurism of the ophthalmic artery in which it was employed with success by Prof. Gioppi of Padua, and infers from this that the same means might be resorted to with immediate benefit in intra-ocular hæmorrhage.

Rivaud-Landrau makes the following remark, speaking of the occurrence of the accident after the extraction of cataract: "La quantité du sang évacué ne peut jamais être assez considérable pour entraîner à sa suite un danger sérieux."† This assertion is not borne out by the case I have just related; and in another case, operated on by White Cooper, the hæmorrhage lasted for thirty-seven hours, and, the patient being eighty-seven years of age, serious doubts were entertained of saving her life.

Dublin, September, 1859.

* Emorragie Intra-oculari od Enoftalmie, e Proposta della Compressione Digitale per Arrestarle. Per A. Olioli, medico-chirurgo oculista esercente in Galliate.

† *Gazette des Hôpitaux*, May 31st, 1859.

DIFFICULTIES ATTENDING THE TYING OF THE ANTERIOR AND POSTERIOR TIBIAL ARTERIES AFTER AMPUTATION OF THE LEG.—M. Verneuil read, a short time ago, before the Academy of Medicine of Paris, an elaborate paper wherein he advises, when any difficulty is experienced in drawing out the arteries, after the amputation of the leg at the junction of the upper with the middle third, to proceed at once, by simply extending the line of amputation to the deligation of the lower third of the popliteal artery. The causes of the difficulty of finding the arteries in the wound are, according to the author—1, The retraction of the vessels, which are thereby completely concealed; 2, Their relation with surrounding parts, which prevents the surgeon from taking hold of them; or, 3, The alteration of the coats of the vessel (especially the outer coat), which causes them to give way under the thread. Those who have frequently amputated legs will remember that M. Verneuil is right as to the difficulty of seizing the arteries in the flaps.