metastatic cancer.[5] The well-known association between a hypercoagulable state and cancer led the authors to wonder whether ACC of the right middle meatus led to SOV thrombosis of the right orbit.

In conclusion, if clinical signs of orbital cellulitis develop, it is important to rule out the presence of SOV thrombosis, which can cause cavernous sinus thrombosis. When CT image shows SOV thrombosis, one should be aware that intranasal malignancies may be an underlying cause.

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Knapp–Rønne choroidal melanoma: a clinicopathological report

A 37-year-old white male was evaluated for a melanotic fundus lesion with vitreous floaters diagnosed a month prior. Visual acuity was 20/25 in both eyes, with bilateral normal intraocular pressure and anterior segment examination. Funduscopy of the left eye revealed a preretinal spherical dark brown tumour with a smooth surface with minimal subretinal base visible at its superior border (Fig. 1A). Despite its dark colour, prominent vessels could be detected clinically beneath the tumour surface. The retina appeared eroded by invasion of the tumour from choroid into the vitreous. The superior branch of the superotemporal retinal vein appeared to be encased within the tumour mass. Patches of pigment were scattered on the retinal surface along the inferotemporal arcade (Fig. 1B). Few pigmented cells were floating within vitreous. Ultrasonography demonstrated a round lesion of 5.6mm thickness, with medium internal reflectivity, and choroidal excavation (Fig. 1C). Fluorescein angiography showed complete blockage of choroidal fluorescence by the dark lesion throughout the angiogram; nevertheless, there was late fluorescein leakage from prominent wormlike engorged vessel at tumour apex (Fig. 1D). Because of its unusual presentation, with dark coloration and dispersion of pigmented cells, the differential diagnosis included choroidal melanoma, melanocytoma, and pigment epithelial neoplasm. Tumour biopsy was performed that was complicated by massive intraoperative haemorrhage from the tumour. Cytopathology revealed malignant melanoma cells. Because of extensive intraocular dispersion of tumour cells in association with extensive vitreous haemorrhage, enucleation was undertaken.

Histopathology showed a choroidal melanoma of mixed-cell type (Fig. 2A), intensively stained with HMB-45 (Fig. 2B). The tumour showed dilated vessels near the apex with few vascular spaces without endothelial lining (Fig. 2C). The sensory retina covered tumour periphery (Fig. 2D), but centrally, the retina was totally replaced by the tumour, which invaded into the vitreous. The clinical and pathologic findings suggested a choroidal melanoma of Knapp–Rønne type.

This type of melanoma is named after Herman Knapp[1] and Henning Rønne,[2] who first described this rare growth pattern that manifests in 0.4% of choroidal melanomas. Knapp–Rønne melanoma is characterized by its location near the papilla, its early penetration of the sensory retina with invasion into vitreous, its histology with bloodless and blood-filled cavernous spaces, and its frequent manifestation by massive vitreous hemorrhage.[1–5]

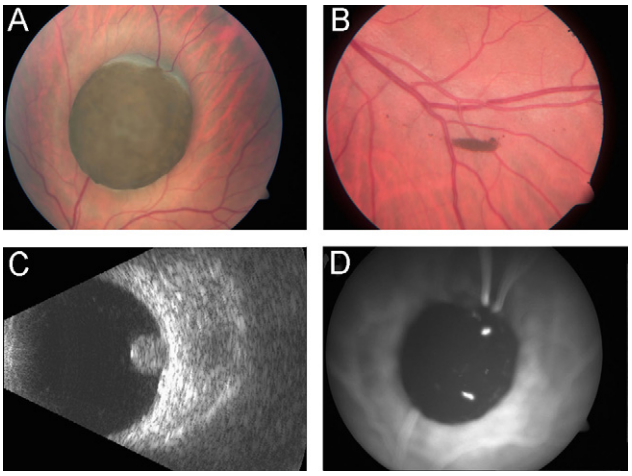

Fig. 1—A, Funduscopy of a heavily pigmented lesion obscuring the retinal vasculature. B, Dispersion of pigmented cells on retinal surface along the inferotemporal arcade. C, Ultrasonography shows a round-shaped lesion of 5.6 mm thickness. D, Fluorescein angiography shows fluorescein leakage from engorged vessels at the tumour apex.

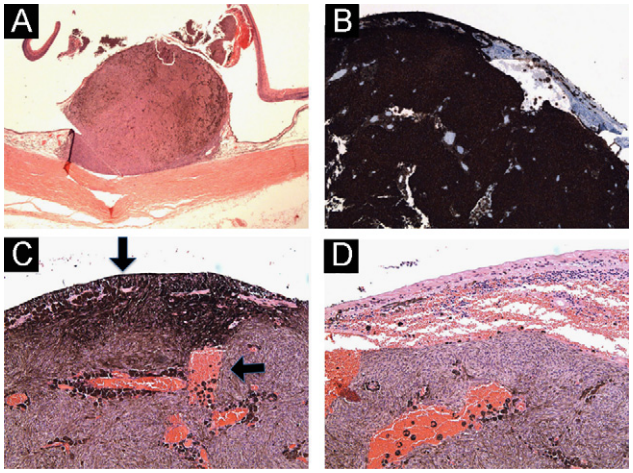

Fig. 2—A, Low-power photomicrograph of a narrow-based, round, choroidal melanoma (hematoxylin and eosin [H&E], original magnification ×12.5). B, Intense and diffuse immunostaining for HMB-45 confirming the melanocytic origin of the tumour. The boundary between the invasive tumour and the replaced neurosensory retina is discernible near tumour apex to the right (brown chromogen, original magnification ×40). C, Apex of the tumour showing dense pigmentation, dilated vessels, and vascular lakes (*horizontal arrow*); the tumour is in direct contact with the vitreous (*vertical arrow*; H&E, original magnification ×200). D, Photomicrograph nearer to tumour base showing, from right to left, progressive thinning of the retina from the base toward tumour apex, with subretinal bleeding (H&E, original magnification ×200).

Knapp–Rønne melanoma also has been termed as vitreous melanoma, haemangioma-like malignant melanoma, and preretinal choroidal melanosarcoma.[1–3] This growth pattern differs from retinal invasion of a collar button melanoma, in which a portion of the tumour grows between Bruch's membrane and sensory retina before retinal invasion. No particular histologic features have been observed to explain the Knapp–Rønne melanoma growth behaviour. Tumour-related hemorrhage is a presenting manifestation in 3% of melanomas generally.[4] It was postulated that the greater propensity to hemorrhage in Knapp–Rønne melanoma is due to marked engorgement of tumour feeding vessels by the strangulating effect of Bruch membrane.[3–5] This entity is to be recognized by its clinical features to be differentiated from other heavily pigmented fundus tumours with dispersion of pigmented cells, such as melanocytoma and pigment epithelial tumours. Because of its high vascularity, the risk for profuse hemorrhage during tumour biopsy should be carefully weighed in case of Knapp–Rønne melanoma.

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Split Ozurdex implant: a caution

Ozurdex (Allergan, Ireland) is a novel dexamethasone implant approved recently by the FDA (Food and Drug Administration) for macular edema secondary to vein occlusions and posterior uveitis.[1] The implant is being used off label in macular edema due to various causes including diabetic macular edema.[2,3] We report an unusual case in which the implant was noted to be broken into two parts within the vitreous cavity after injecting.

A 61-year-old male was treated with Ozurdex injection for diabetic macular edema in the left eye. He had grid laser previously and Avastin injection with not much improvement. The injection was given under sterile conditions with the 22G applicator provided by the manufacturer in the superotemporal quadrant under topical anaesthesia. The applicator was held parallel to the limbus and the sclera was engaged at an oblique angle with the bevel facing up. The needle was advanced for about 1 mm and then redirected toward the centre of the vitreous cavity until the sleeve reached the conjunctiva. The actuator button was then depressed until the click was heard. The needle was withdrawn in the same manner as inserted. On indirect ophthalmoscopy immediately postinjection, the implant was visualized split into two parts within the vitreous cavity (Fig. 1).

Dexamethasone is a potent steroid with good antiinflammatory and anti-VEGF action showing promising results in resolution of diabetic macular edema.[4] Its use as an intravitreal injection is limited by its short half-life within the vitreous cavity and higher rate of glaucoma and