

INTRODUCTION

Teratoma is a rare type of tumour whose orbital presentation is only 0.8% of cases, and it usually manifests as a lesion of mature ectopic tissues present at birth on healthy newborns¹. We discuss the case of a female newborn with findings in prenatal ultrasound of a right orbital mass who was diagnosed with grade I immature orbital teratoma.

CASE REPORT

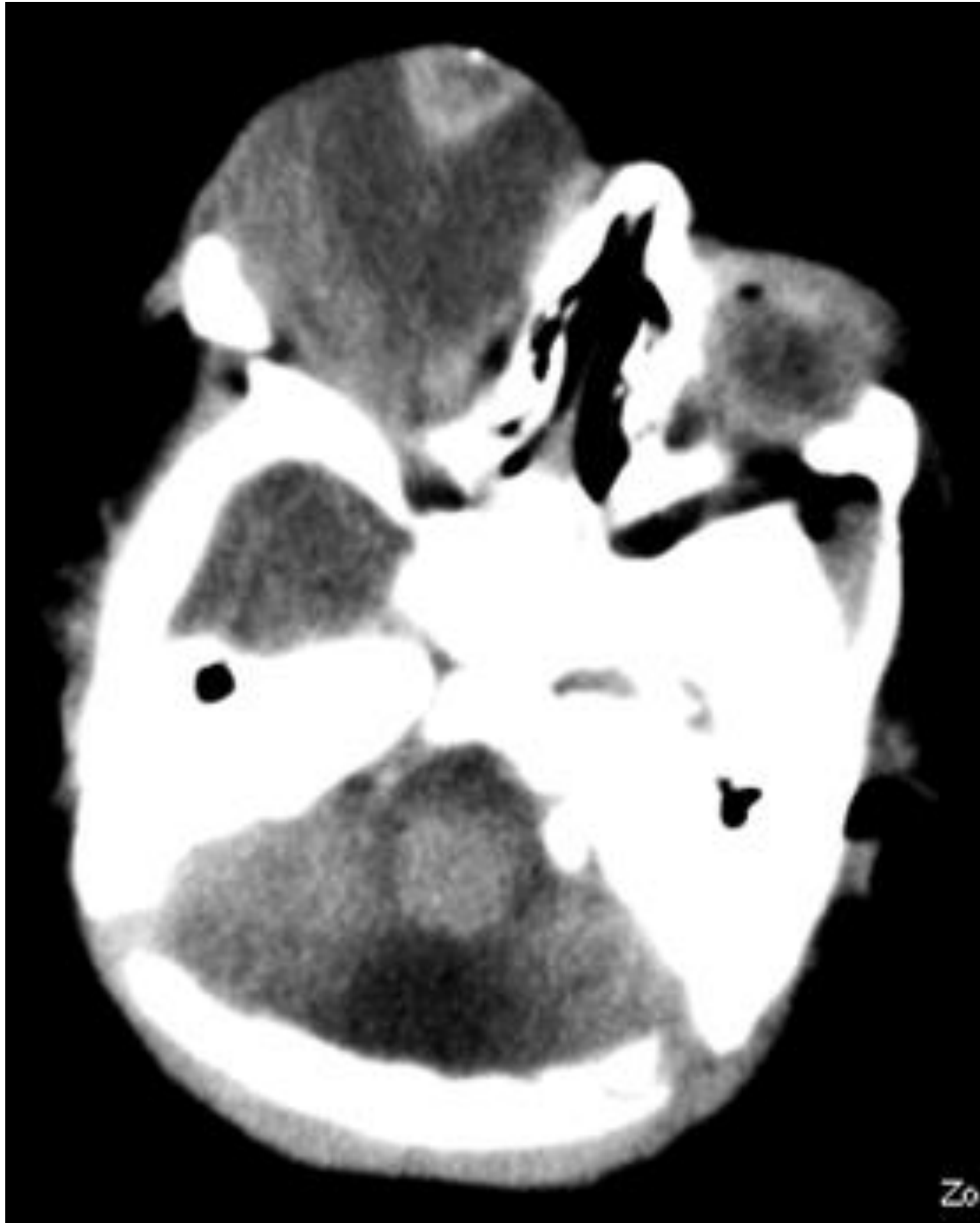
A 30-year-old pregnant woman, gravida 4, para 2 and 1 previous miscarriage, underwent detailed anatomy ultrasound at 26.1 weeks of gestation and evidenced right ocular protrusion associated with orbital enlargement and tumour with cystic degeneration (image 1). The perinatology department followed the fetus with a suspected retinoblastoma diagnosis. Caesarean delivery was conducted on week 37.5, resulting in a female newborn with evidence of a large mass in the right orbit.

The Postnatal Orbit Computerized Tomography showed a structural lesion with a heterogeneous density was described, with the presence of a dysmorphic eyeball

Image 1. Week 26.1 Detailed Anatomy Ultrasound



Image 2. Postnatal Orbit Simple Computerized Tomography



with soft tissue density and two calcifications. Thickening and increase of the extraocular muscle towards the lateral aspect of the orbit were also found, with orbital and orbital fissure enlargement and without intracranial protrusion of the tumour. No alterations on the left eyeball or other ipsilateral structures were found (image 2). A giant congenital teratoma was suspected. β -HCG and Alpha-fetoprotein markers were negative.

At two months of age, the patient underwent right orbital exenteration with tumour resection, performed without complications. The histopathological report presented eyeball tissue with a neoplastic lesion of germinal origin compatible with grade I immature teratoma (5% immature component). During 14 months of follow-up, no relapses were reported.

DISCUSSION

Notwithstanding its rarity, orbital teratoma can also consist of immature tissues with only 11 cases found reported in the literature (Table 1). Among the differential diagnoses observed in the reported cases dermoid cyst, lymphangioma, hemangioma, or arteriovenous malformation have been the most common¹. Although most cases report proper attendance at prenatal check-ups, prenatal ultrasound only revealed the lesion in two cases. Surgical intervention is the preferred therapeutic method. Conservative management is always sought as the extension and compromise of the tumour allow it^{2,3}.

Table 1. Characteristics of Immature Orbital Teratoma cases

Author	Sex	Lat	Dx	Mal	Ext	Mrt
1979 Schaal et al.	M	R	Post	No	No	-
1983 Soares et al.	F	L	Post	Yes	Yes	Yes
1985 Schaal et al.	M	R	Pre	No	No	No
2002 Wilson et al.	F	L	Post	Yes	No	No
2004 Gamboa-Barragán et al.	M	R	Post	Yes	Yes	Yes
2005 Gnanaraj et al.	F	L	Post	No	No	No
2012 Ogun et al.	F	L	Post	No	No	No
2015 Urcuqui et al.	M	R	Post	Yes	Yes	No
2020 Bojino et al.	F	L	Post	No	No	No
2021 Plaza-Ontiveros	M	R	Post	Yes	Yes	No
2021 Yang et al.	F	L	Pre	No	No	-

Lat: Laterality, Dx: Diagnosis, Mal: Malignancy, Ext: Extension, Mrt: Mortality, M: Male, F: Female, R: Right, L: Left, Post: Postnatal, Pre: Prenatal

CONCLUSIONS

Despite not being a preventable pathology, prenatal diagnosis is useful for the prognosis, monitoring and management of the disease. It is important to report these cases given their infrequency for imaging specialists to become familiar with this type of lesion, allowing an early diagnostic and therapeutic approach.

REFERENCES

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