

SHORT COMMUNICATION

CHORANGIOMA AND JOHN CLARKE

ROSA GOUVEIA^{1,2,3}, BEATRIZ SILVA^{1,2}, FRANCISCO CORTE-REAL^{1,2}¹Forensic Pathology, Instituto Nacional de Medicina Legal e Ciências Forenses, Coimbra, Portugal²Faculty of Medicine, University of Coimbra, Coimbra, Portugal³CHLO, Lisboa, Portugal

Perinatal mortality is a relevant indicator of a country health status. Through the centuries, measures have been promoted to reduce modifiable risk factors or to treat installed diseases. That was the example of the English medical doctor John Clarke (1758/1760?-1851), who dedicated his life to mother-child health care [1]. Among his contributions is the report of a placental tumour in 1798, named *Chorangioma placenta* (CP) [2]. It may occur in primiparas or multiparas, apparently increasing with the mother's age, with association to the mother's hypertension or diabetes mellitus [3]. Chorangioma

may appear in single or multiple pregnancies and may lead to foetal heart failure, hydrops, or sudden intra-uterine death [3]. The authors report the case of a 2 cm diameter chorangioma (Fig. 1A), which ended in premature death of the male foetus *in utero* at 35 weeks and 5 days, in a multiparous mother. Histopathological examination confirmed the macroscopic suspicion by disclosing a benign vascular capillary proliferation (Fig. 1B) positive for endothelial markers CD34/CD31 (Fig. 1C). Its current incidence ranges from 0.5% to 1% of analysed placentas [4] and may represent a primitive angioblastic tissue

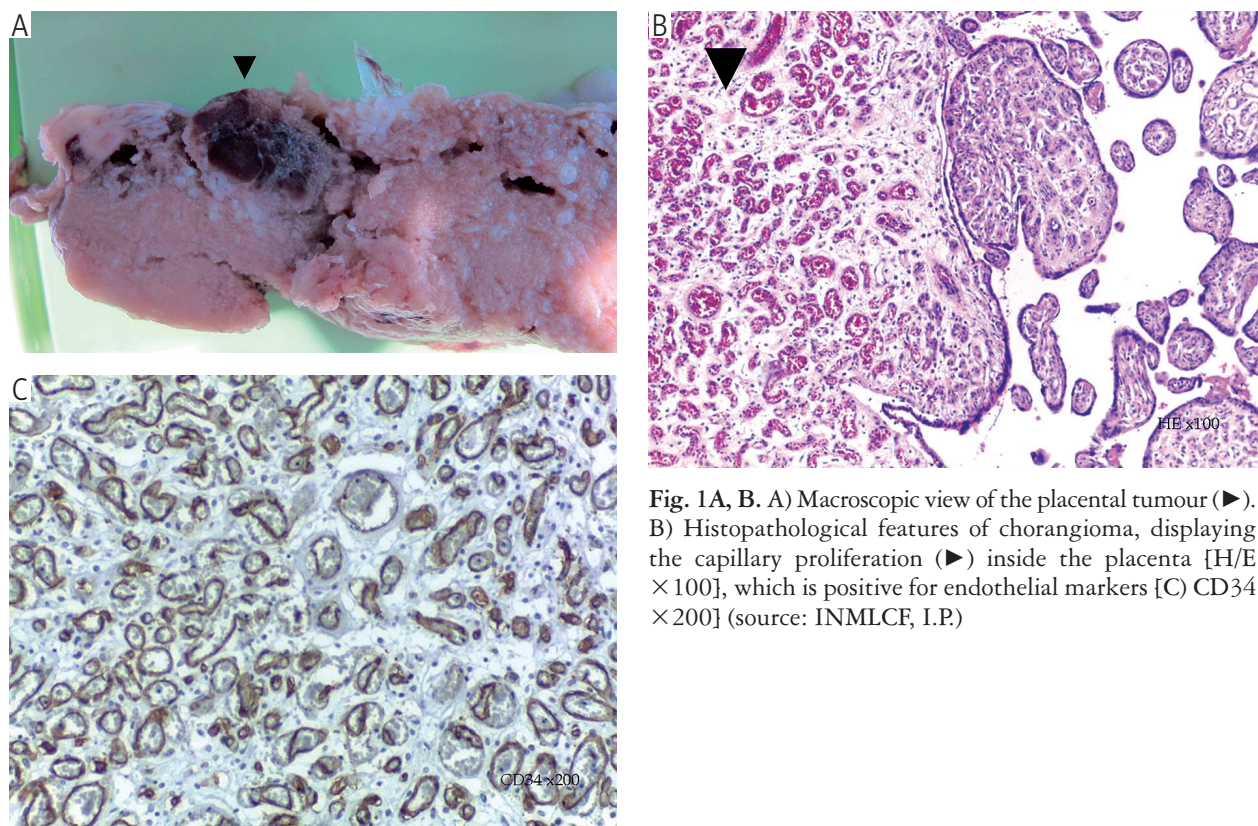


Fig. 1A, B. A) Macroscopic view of the placental tumour (►). B) Histopathological features of chorangioma, displaying the capillary proliferation (►) inside the placenta [H/E ×100], which is positive for endothelial markers [C] CD34 ×200] (source: INMLCF, I.P.)

malformation, aggravated with hypoxia and/or haemodynamic changes during pregnancy. To conclude, we highlight the relevance of chorangioma as a cause of perinatal death, which is around 30% [4].

Acknowledgements

To Instituto Nacional de Medicina Legal e Ciências Forenses, I.P.

The authors declare no conflict of interest.

References

1. Hunter KR. Dr John Clarke: licentiate in midwifery of the Royal College of Physicians of London. *Clin Med* 2002; 2: 153-156.
2. Clarke J. Tumor found in the substance of the human placenta. *Philosophical Transactions of the Royal Society of London* 1798; 88: 361-368.
3. Lež C, Fures R, Hrgovic Z, et al. Chorangioma placentæ. *Rare Tumors* 2010; 2: e67.
4. Sirotkina M, Douroudis K, Westgren M, Papadogiannakis N. Association of chorangiomas to hypoxia-related placental changes in singleton and multiple pregnancy placentas. *Placenta* 2016; 39: 154-159.

Address for correspondence

Prof. Rosa Henriques de Gouveia
Forensic Pathology, Central Branch
Instituto Nacional de Medicina Legal e Ciências Forenses, I.P.
Largo da Sé Nova
3000-213 Coimbra, Portugal
e-mail: rhgouveia@mail.telepac.pt