DATA CONFIDENTIALITY
The authors declare having followed the protocols in use at their working center regarding patients’ data publication.

PATIENT CONSENT
Obtained.

REFERENCES

Dear Editor,
The recently published article by Pinto et al highlights a rare disorder called hereditary angioedema (HAE) diagnosed in a pregnant woman.1 This disease is characterized by recurrent and unpredictable episodes of swelling of the upper airways and gastrointestinal tract.2,3 The laryngeal oedema may cause fatal asphyxiation.2

The most common forms of HAE are types I and II, caused by deficiency and dysfunction of C1 inhibitor (C1-INH), respectively.4 A less prevalent form of HAE with normal C1 inhibitor (HAE-nC1-INH) has the distinctive characteristic of showing normal complement levels and affects mainly women, while men are often asymptomatic carriers.3

In the largest Portuguese cohort that included 126 patients, HAE-nC1-INH was diagnosed in five patients (4%).2 In the first trimester (41.7%).3 Moreover, symptoms during pregnancy may be misdiagnosed, especially if the timing matches that of the onset of...
of the disease and could masquerade as obstetrical complications.\textsuperscript{5} Labor generally does not precipitate attacks, and the rate of caesarean deliveries is not higher compared to the general population.\textsuperscript{3} Spontaneous abortion occurrence is similar to non-affected women.\textsuperscript{3}

Treatment options approved for the gestational period are limited.\textsuperscript{5} C1-INH concentrate (20 units per kg) is the preferred agent for short-term and long-term prophylaxis, and acute treatment during pregnancies, since it is the best studied approach.\textsuperscript{3} C1-INH concentrate should be available during delivery and 48 hours afterwards.\textsuperscript{5} If not available, plasma should be administered.\textsuperscript{3} Icatibant and lanadelumab has not been studied in pregnancy.\textsuperscript{3,5} Androgens should be avoided due to virilization of the female fetus, but can be used in case of a male fetus, and under supervision of an endocrinologist.\textsuperscript{3}

The effect of pregnancy is difficult to predict, and that also applies to subsequent pregnancies.\textsuperscript{3} A multidisciplinary approach, involving obstetricians and allergists / immunologists is crucial.\textsuperscript{3} We highlight the need for prospective studies to guide the management of HAE-nC1-INH during pregnancy.

**AUTHOR CONTRIBUTIONS**

ALM: Conception of the work, data collection, writing and approval of the manuscript.

AG, LMB: Writing and approval of the manuscript.

**REFERENCES**


**PROTECTION OF HUMANS AND ANIMALS**

The authors declare that the procedures were followed according to the regulations established by the Clinical Research and Ethics Committee and to the Helsinki Declaration of the World Medical Association updated in 2013.

**DATA CONFIDENTIALITY**

The authors declare having followed the protocols in use at their working center regarding patients’ data publication.

**COMPETING INTERESTS**

ALM has received support for attending the Drug Hypersensitivity Meeting (DHM) 2023; participates in the board of Grupo de Interesse ‘Asma e Alergia no Desporto’ (Associação Portuguesa de Alergia e Imunologia Clínica).

All other authors have declared that no competing interests exist.

**FUNDING SOURCES**

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.