The contribution of ultrasound in the antenatal diagnosis of omphalocele and gastroschisis

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Objective
To evaluate the contribution of ultrasound in the diagnosis and prognosis of omphalocele and gastroschisis.

Methods
We conducted a retrospective and prospective study of 10 cases of gastroschisis and 16 cases of omphalocele, collected between 2012 and 2018, three of which were part of Beckwith-Wiedemann syndrome.

Results
The sensitivity of ultrasound in the antenatal diagnosis of omphalocele and gastroschisis varies according to the term of the pregnancy, from 73% in the first trimester to 91.5% and 95% in the 2nd and 3rd trimester, respectively. The performance of the ultrasound was better when performed by a senior gynecologist rather than a resident. The antenatal diagnosis of these malformations led to amniocenteses in 8 cases, allowing the diagnosis of 4 cases of trisomy 18 and one case of trisomy 13. It allowed the decision of a medical termination of pregnancy in 9 cases. Antenatal ultrasound had allowed antenatal follow up and delivery planning in the continuing pregnancies. 6 newborns died (3 cases of omphalocele and 3 cases of gastroschisis), 4 of which postoperatively.

Conclusion
Antenatal ultrasound can be used to diagnose omphalocele and gastroschisis and to look for associated malformations, thus allowing the option of a medical termination early in the pregnancy as well as the pre- and postnatal management of the continuing pregnancies.