

Prenatal diagnosis of Vein Galen aneurysmal malformation: perinatal outcomes and Systematic review of literature

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Objectives: The aim of this study is to describe the outcome of pregnancies with prenatal diagnosis of Vein Galen aneurysmal malformation (VGAM), and perform systematic review of literature.

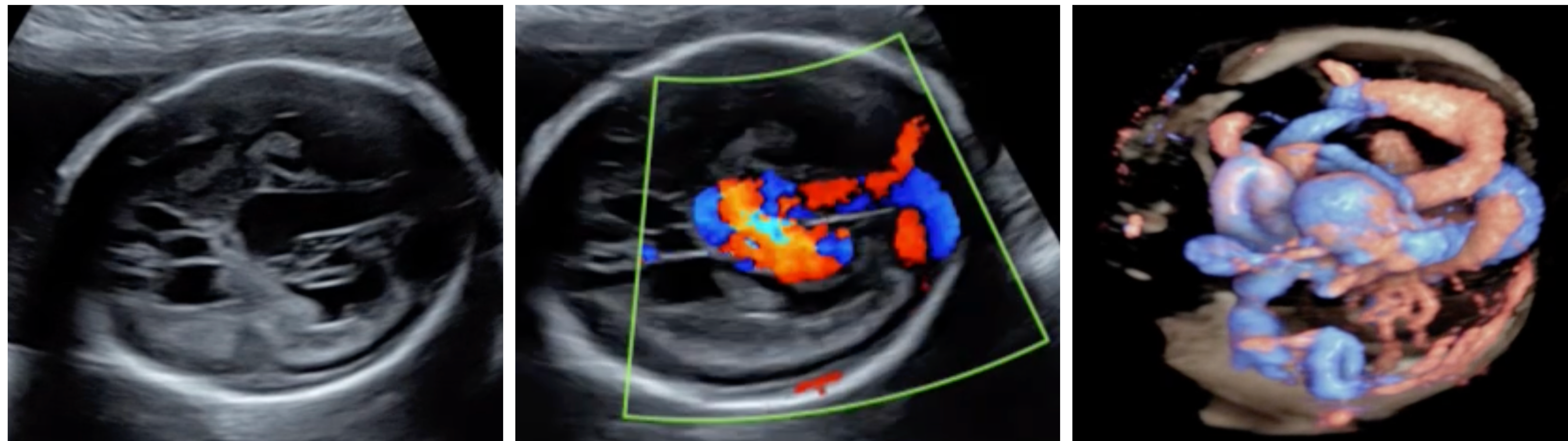
Methods: We performed a retrospective descriptive study of all cases with prenatal diagnosis of VGA, occurring between 2010 and 2013 in four tertiary centers. We review prenatal diagnosis, fetal hemodynamic and perinatal outcome in each case.

We also conducted literature search of VGAM in MEDLINE, PUBMED, and SCIELO, data bases. Series with 5 or more cases were included.

Results: In our series 15 cases of VGAM (Figure 1) were found, mean gestational age at diagnosis was 33.1 weeks (25-39 weeks). At time of diagnosis 10/13 present heart failure, and only 2/15 with an associated brain injury.

Seven articles were reviewed and our cases were included in the analysis. A total of 196 cases of VGAM were included, 15 ours and 181 previously published. Perinatal outcomes of our series and systematic review are showed in table 1.

Figure 1. Vein Galen aneurism: B Mode, Color Doppler, 3D Color Doppler



x	Our Serie	Systematic Review
N	15	196
TOP/Stillbirth	13,3 % (2/15)	25 % (32/128)
Prenatal Cardiac Failure (IT / HYDROPS)	76,9 % (10/13)	61,4 % (100/163)
Alive	50 % (6/12)	64,1 % (116/181)

Table 1.Vein Galen aneurism: Perinatal Outcomes.

Conclusion: VGAM is a rare malformation with high perinatal mortality, most frequently due to heart failure. However, survival patients have a good prognosis. In the near future, fetal therapy will help reduce the perinatal mortality rate of VGAM.