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Fatal Congenital Heart Disease in a Postpartum Woman

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Fatal Congenital Heart Disease in a Postpartum Woman

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Abstract: The image represents the post-mortem heart of a 28 years-old female patient, diagnosed in childhood with complete common atrioventricular canal defect. At time of diagnosis, the family refused surgery. Despite being advised against pregnancy, she became pregnant. On presentation to hospital, she was cyanotic, with clubbed fingers, hemodynamically instable, in sinus rhythm, with Eisenmenger syndrome and respiratory failure partially responsive to oxygen. During pregnancy, owing to systemic vasodilatation, the right-to-left shunt is increased, with more severe cyanosis and low cardiac output [1]. Echocardiography revealed complete common atrioventricular canal defect, a single atrioventricular valve with severe regurgitation, right ventricular hypertrophy, pulmonary artery dilatation, severe pulmonary hypertension and hypoplastic left ventricle. She gave birth vaginally to a healthy boy. Three days later, the patient died. The autopsy revealed hepatomegaly, greatly hypertrophied right ventricle with a purplish clot ascending the dilated pulmonary arteries and hypoplastic left ventricle with narrowed chamber. A single valve was observed between the atria and ventricles, making all four heart chambers communicate, also insufficiently developed interventricular septum and its congenital absence in the cranial third. These morphological changes define complete common atrioventricular canal defect, with right ventricular dominance, a rare and impressive malformation, mandatory to be solved in early childhood [2,3].

Keywords: atrioventricular defect; Eisenmenger syndrome; single atrioventricular valve; clubbed fingers; right-to-left shunt

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Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki and approved by the Ethics Committee of ORADEA COUNTY EMERGENCY CLINICAL HOSPITAL, ROMANIA (protocol number 14910/15.05.2025), for studies involving humans.

Informed Consent Statement: Informed consent was obtained from the subject involved in the study.

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Data Availability Statement: The raw data supporting the conclusions of this article will be made available by the authors on request. The data are not publicity available due to privacy reasons.

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