
Abstract

TITLE: The use of Metaverse in Fetal Medicine

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PRESENTATION TYPE: No Preference

CURRENT TOPIC: Obstetrics

CURRENT SUB-TOPIC: 11. Artificial intelligence, education, simulation, safety and other innovations

ABSTRACT BODY:

Objectives: The aim here is to implement the use of the metaverse in multidisciplinary discussion in fetal medicine.

Methods: The first step was to train students and specialists from different areas in multidisciplinary discussions, which take place in real time and without geographical obstacles, adding features ranging from the possibility to view an imaging sequence of 2D slices to a shared navigation inside a 3D organ. These experiments have been developed in the Spatial.io platform, that supports a wide range of devices. The cases already studied are from ultrasound (US) and magnetic resonance imaging (MRI) files in fetal medicine. Cases in the first trimester of pregnancy were discussed based on US. In the third trimester, cases were evaluated from US and MRI. The cases studied were ventricular dilatation, encephalocele, lymphangioma, cervical teratoma, sacrococcygeal teratoma, congenital diaphragmatic hernia, Chiari II malformation, trisomy 21, Apert syndrome and placenta accreta.

Results: The average discussion time for each case was approximately 15 minutes. The average number of participants in each discussion was five. Discussions were successful in all cases.

Conclusions: Metaverse brings many new features to the medical field communication. It has great potential as a digital tool to help students and a multidisciplinary team to improve collaboration and understanding of complex fetal malformations.

Additional details

KEYWORDS: Virtual reality, 3D/4D, Fetal anomalies, Magnetic resonance imaging.

(No Table Selected)

