Abstract

In the medical domain, one of the major challenges faced by the medical experts is the extraction of critical information for medical diagnosis. Specialized tools are necessary to assist the experts in diagnosing the diseases. Information retrieval is difficult in the case of ultrasound medical images due to its low resolution making diagnosis difficult. Gestational diabetes is a form of diabetes, which affects pregnant women. It is believed that the hormones produced during pregnancy reduce a woman's receptivity to insulin, leading to high blood sugar levels. The duration of departures from normogycemia in maternal diabetes is the critical factor. The earlier detection of GDM occurs, the lesser the influence on placental development, which indirectly accounts for fetal growth and metabolism. This pilot study involves the feasibility for classifying the ultrasound images of placenta with complicating diabetes based on placenta thickness using statistical textural features.

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**Index Terms**
Computer Science  
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processing
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  thickness equation