

THREE DIMENSIONAL MAGNETIC RESONANCE PELVIMETRY AND PREDICTION OF LABOR DYSTOCIA

Thesis

Submitted for partial fulfillment of MD degree in radiology

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Title of thesis: three dimensional magnetic resonance pelvimetry and prediction of labor dystocia

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Abstract:

Introduction: The incidence of unjustified caesarean section is remarkably increasing in Egypt that results in maternal morbidity and mortality, however caesarian section is indicated in many cases including dystocia, 3D MRI pelvimetry is a valuable measure in detection of dystocia and hence prevention of complication to the mother or her offspring.

Patients and methods: In this study fifty patients were included that are suspicious of labor dystocia, all these patients subjected to do MRI study with post imaging three dimensional reconstruction, and measurement of detailed pelvic inlet, mid pelvis and pelvic outlet dimensions, that would help us of determination of cases susceptible of labor dystocia and prevention of fetal and maternal morbidity and mortality.

Results: Our study revealed forty two patients delivered by normal vaginal delivery, however eight patients delivered by caesarian section, the results show highly significant difference between pelvic dimensions in cesarean section and normal delivery groups, moreover other contributing factors as fetal birth weight and maternal body mass index.

Conclusion: 3D MRI pelvimetry is a safe effective method for antenatal prediction of labor dystocia.

Key Words: 3D MRI pelvimetry - labor dystocia.