INTRODUCTION

MRI is the diagnostic imaging gold standard for Müllerian Duct anomalies. It allows patients to avoid invasive procedures, particularly in those with low clinical suspicion, and has the ability to detect associated renal and skeletal abnormalities. Multiple studies have shown good agreement of MRI diagnosis to clinical diagnosis ranging from 78% to 100%. However recent studies have shown that MRI has limitations for definitive initial diagnosis with implications that can be clinically significant, life-threatening and potentially fatal.

OBJECTIVES

Define concordance of MRI diagnosis with final diagnosis in patients with suspected Müllerian Tract anomalies from a Quaternary Paediatric and Adolescent Gynaecology (PAG) Centre, to better understand the limitations of MRI and highlight areas of discordance.

METHODS

MRI images of 64 patients with suspected Müllerian Tract anomalies who presented between March 2003 - June 2017 were reviewed. Initial MRI diagnosis was compared to final diagnosis based on clinical, surgical and histological findings. Concordance meant anatomical features on MRI were consistent with clinical, surgical and histological findings, otherwise were considered discordant. Concordance was reviewed in detail for uterine, cervical, and vaginal structures separately. All MRIs were reviewed by a specialist radiologist experienced in PAG.

RESULTS

Mean age at MRI was 15 years (range 10-26) and surgery was carried out in 47/64 (73%).

DISCUSSION

MRI is useful for diagnosis of Müllerian Tract anomalies, particularly in relation to uterine structures.

Discordance related mainly to partial cervical agenesis and in delineation of vaginal septa.

Recognition of limitations is important and if discordance is apparent clinically, further vigilance, investigation or surgery may be pertinent to avoid morbidity & mortality.

REFERENCES