

Introduction:

Placenta accreta spectrum (PAS) refers to abnormal placental invasion. It is a serious condition that is increasing every year as the rates of caesarean sections increase around the world.¹

PAS increases the risk of poor maternal and fetal outcomes, increasing the likelihood of needing a blood transfusions and hysterectomy.

Early diagnosis with modern imaging modalities can help reduce adverse outcomes.

Case Report:

A 32 year old, gravida 4 para 3, lady was deemed high risk due to three previous caesarean sections. She was booked for routine screening and ultrasound scans.

Her anomaly scan revealed a lateral, low lying placenta. Repeat ultrasound scan at 32 weeks gestation suggested the placenta was still abutting the cervical os. At 35+3 weeks, the same findings were noted with possible breaching of the bladder serosa. An urgent MRI revealed a similar diagnosis of placenta percreta.

She was delivered by elective caesarean section at 36+2 weeks gestation.

A total abdominal hysterectomy plus bilateral salpingectomy was performed immediately after delivery of the baby . She recovered well and was discharged home.

Figure 1.

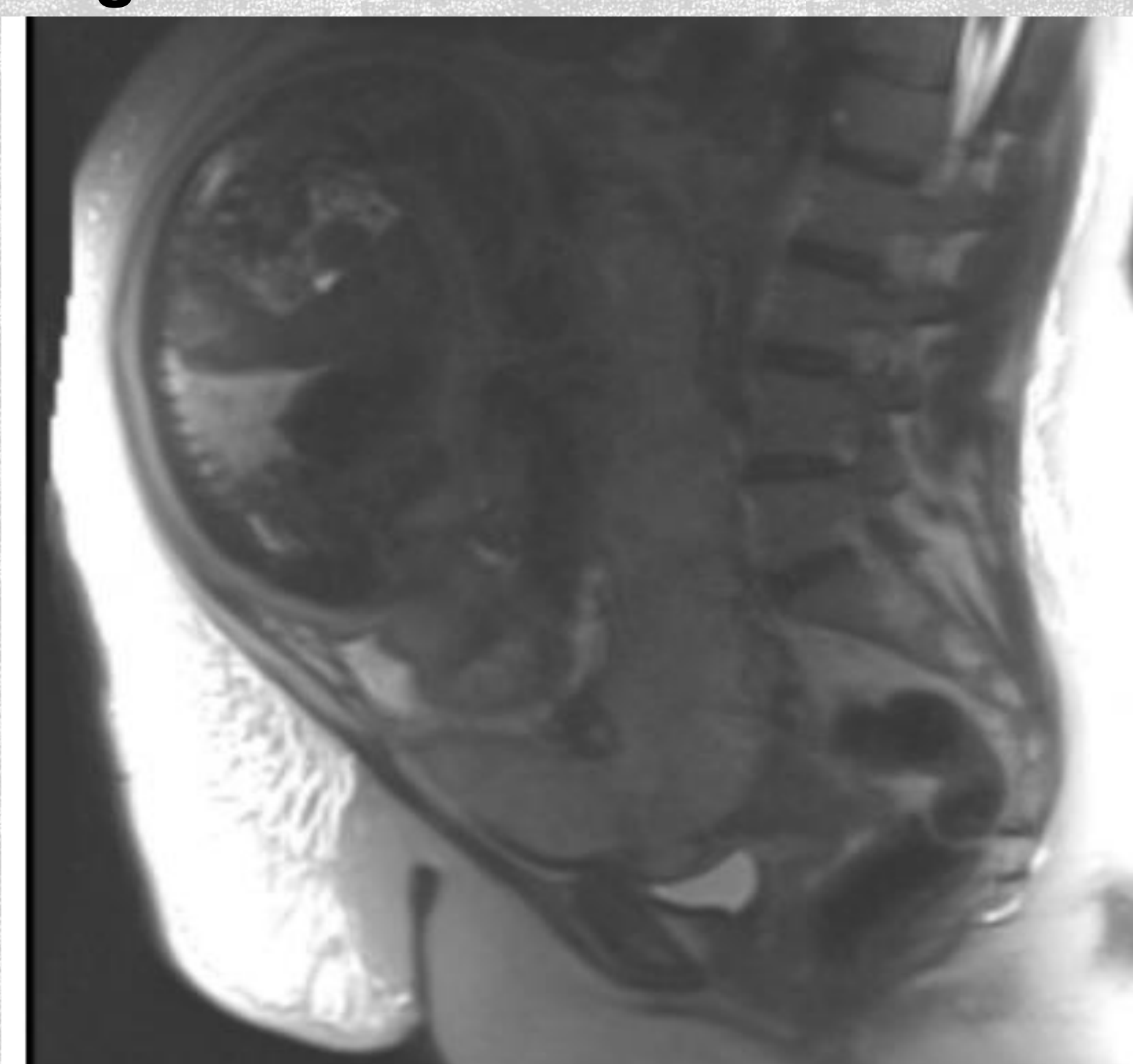
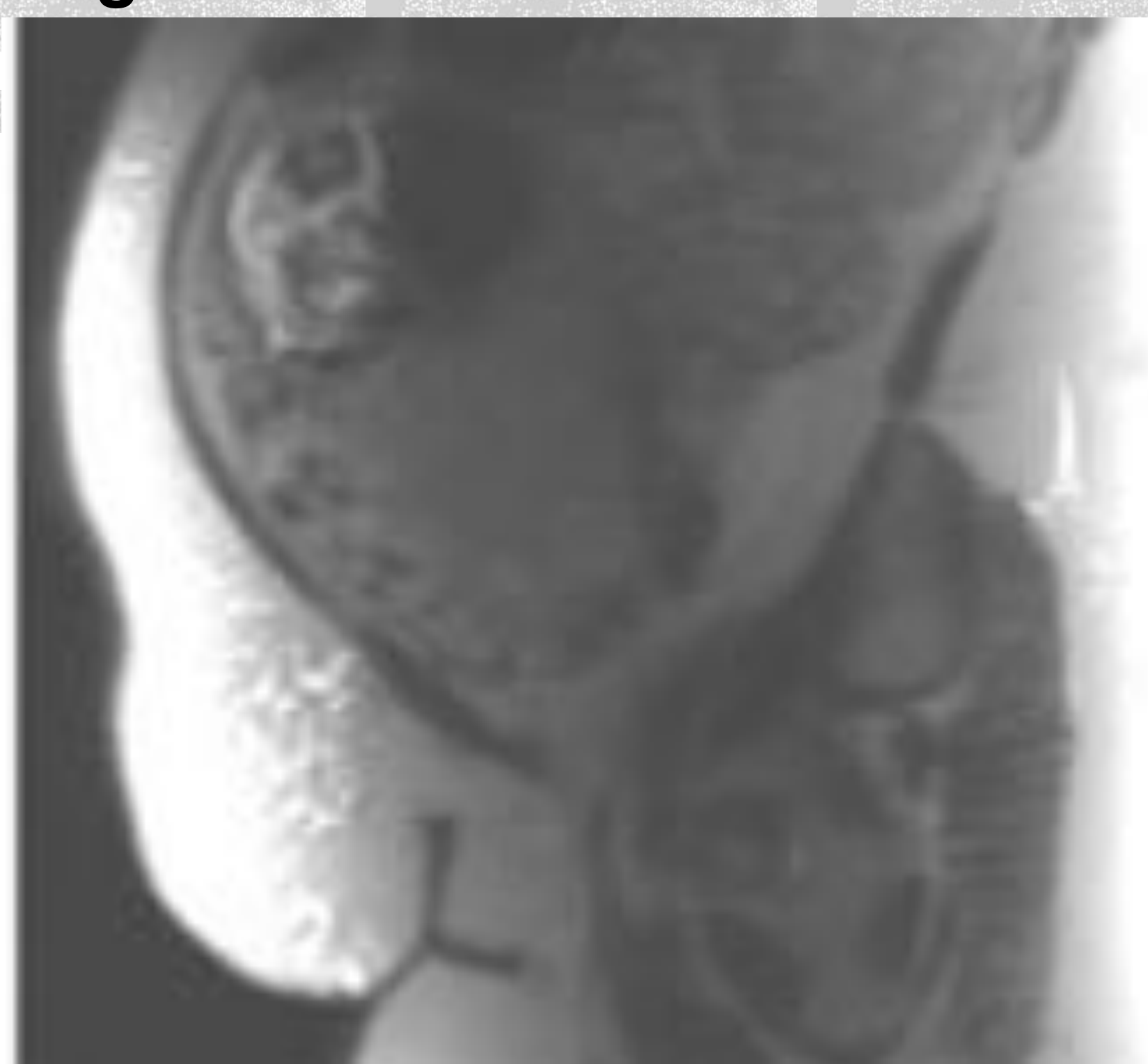


Figure 2.



Figures 1, 2: MRI images displaying complete placenta previa (grade 4).

Discussion:

- Early and accurate diagnosis of PAS significantly improves fetal and maternal outcomes.¹
- Both ultrasound and MRI are highly accurate when diagnosing PAS. Although ultrasound is often preferred as it is less invasive and least expensive, there is not much evidence to suggest either modality is better than the other.^{2,3}
- More research is needed to compare combined versus single imaging modalities for improving accuracy of diagnosis and thus, improving maternal and fetal outcomes.³
- In this case, combined imaging modalities were used to aid in the early diagnosis and surgical planning of placenta percreta. The overall outcome for both mother and baby was positive.

References:

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- (2) D'Antonio, F., Iacovella, C., Palacios-Jaraquemada, J., Bruno, C.H., Manzoli, L. and Bhide, A. (2014). Prenatal identification of invasive placenta using magnetic resonance imaging: systematic review and meta-analysis. *Ultrasound in Obstetrics & Gynecology*, 44(1), pp.8–16.
- (3)Oliviera Carniello, M.D., L.G. Oliveira Brito, Luis Otávio Sarian and João Renato Bennini (2022). Diagnosis of placenta accreta spectrum in high-risk women using ultrasonography or magnetic resonance imaging: systematic review and meta-analysis. *Ultrasound in Obstetrics and Gynaecology*, 59(4), pp.428–436.