

Secondary subfertility as the initial presentation of acromegaly – A Case Report

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Introduction

Acromegaly is a rare condition with an annual incidence of 0.2-1.1 cases per 100,000 people with evidence of significant diagnostic delay. Although infertility is commonly seen in women with acromegaly, it seldom thought of as a differential.

Learning outcomes:

- 1) To highlight an interesting case in which infertility was the first presentation of acromegaly
- 2) To highlight the commonality of infertility amongst women with acromegaly, raise clinical suspicion and thereby reduce diagnostic delay

Case Summary

- Here we present the case of a 35-year-old lady, married with 1 child, conceived age 19
- Living in Singapore
- Initial complaint of secondary infertility age 25 – underwent extensive work up before being diagnosed with acromegaly 10 years later

First Presentation (Age 25)

- First presented age 25 having tried to conceive unsuccessful for 5 years. Had one child at age 19
- Regular menstrual periods, no menorrhagia, dysmenorrhea, or dyspareunia
- Work up included US pelvis which showed a polyp, subsequent hysterosalpingography and laparoscopy.
- The outcome suggesting endometriosis
- Tx: Unsuccessfully trialled on clomifene. Nil surgical intervention. Patient declined further gynaecology follow up

Second Presentation (Age 33)

- Age 33 returned to the women’s hospital with intermenstrual bleeding
- PMH:
 - diagnosed as hypertensive at age 30, stabilised on lisinopril and amlodipine
 - History of headaches – referred to neurology, defaulted
- Tx: Underwent hysteroscopy and D&C – endometrial polyp was removed

Case Summary -Final presentation (Age 35)

- Referred to the weight management clinic - BMI 35 kg/m²,
- PMH: Hypertensive; Impaired fasting glucose; ongoing headaches (no red flags, no visual field defect)
- No history of galactorrhoea

- On inspection coarse facial appearance with frontal bossing, large nose and large hands (fig 1)
- Clinical assessment – longstanding secondary infertility, HTN, impaired fasting glucose, obesity with coarse facies and large hands (compared with prior photos)



Figure 1: Picture of our patient – hand growth



Figure 2: MRI Pituitary T2 sequence, coronal plane

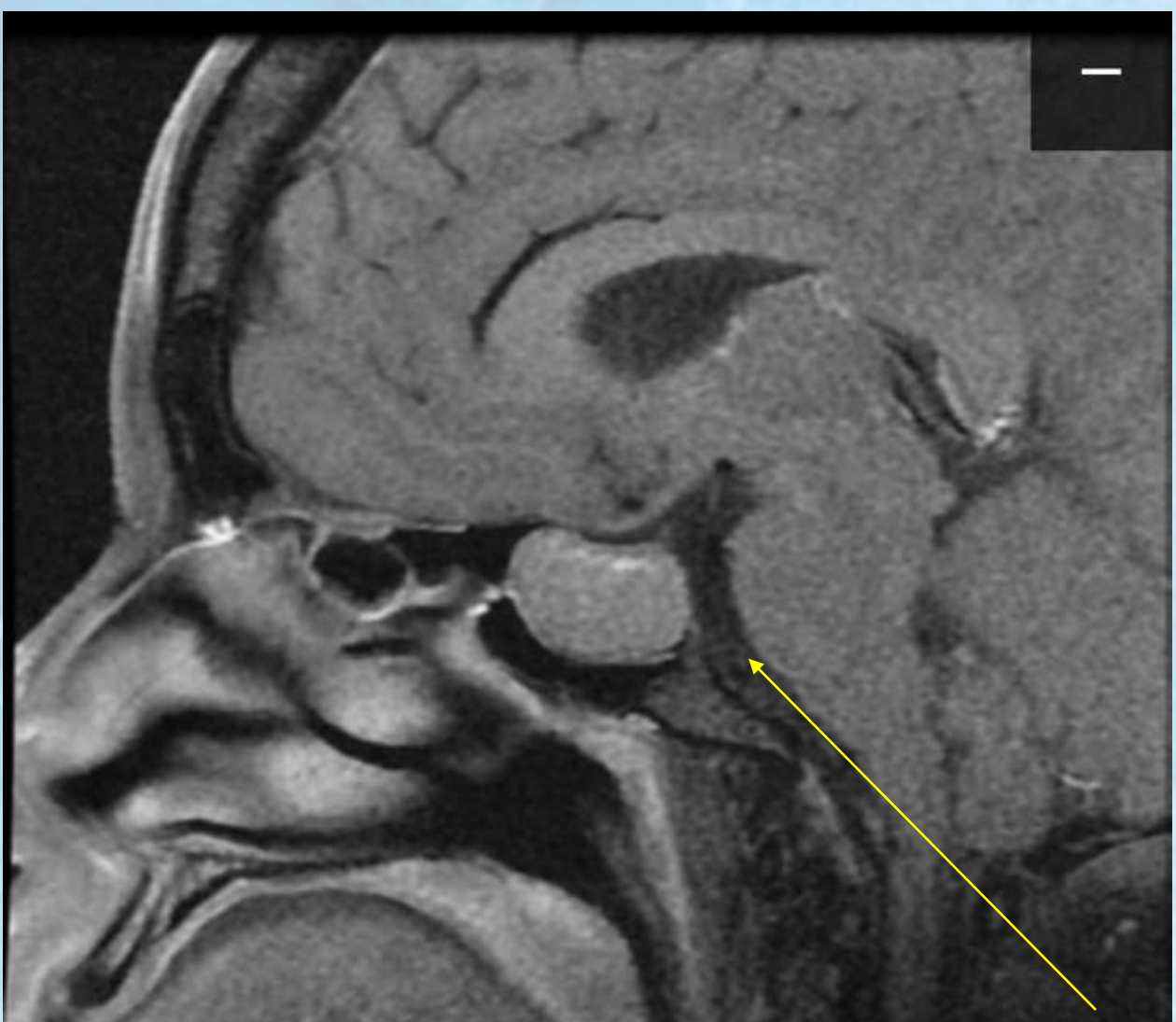


Fig 3: MRI Pituitary T1 sequence with contrast, sagittal plane.

Bloods

- Normal TFTs
- Serum prolactin 132 ug/L ↑ (7.0 – 32.9)
- IGF-1 584 ug/L ↑ (57 – 241)
- OGTT with GH measurement –no suppression of GH (diagnostic of acromegaly)

Imaging

- MRI pituitary – pituitary adenoma (fig 2, 3)

Management

- Trans-sphenoidal surgical resection of pituitary adenoma

Discussion and conclusion

- **Acromegaly** is a rare endocrine condition characterised by persistent over secretion of growth hormone.
- Acral enlargement and coarse facial features are most widely reported with literature largely focusing on cardiac and metabolic complications.
- Diagnostic delay of up to 10 years from initial presentation is documented
- This diagnostic delay is associated with increased morbidity and mortality
- Infertility is widely recognised in women with acromegaly due to a variety of mechanisms. However, owing largely to its rarity, acromegaly is an unlikely differential for infertility patients
- Here we present a case in which infertility was the first presentation of acromegaly and thereby highlight this as a rare differential, raising clinical suspicion with a view to reducing diagnostic delay

References

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