

Investigate the Pelvis or the Patient?

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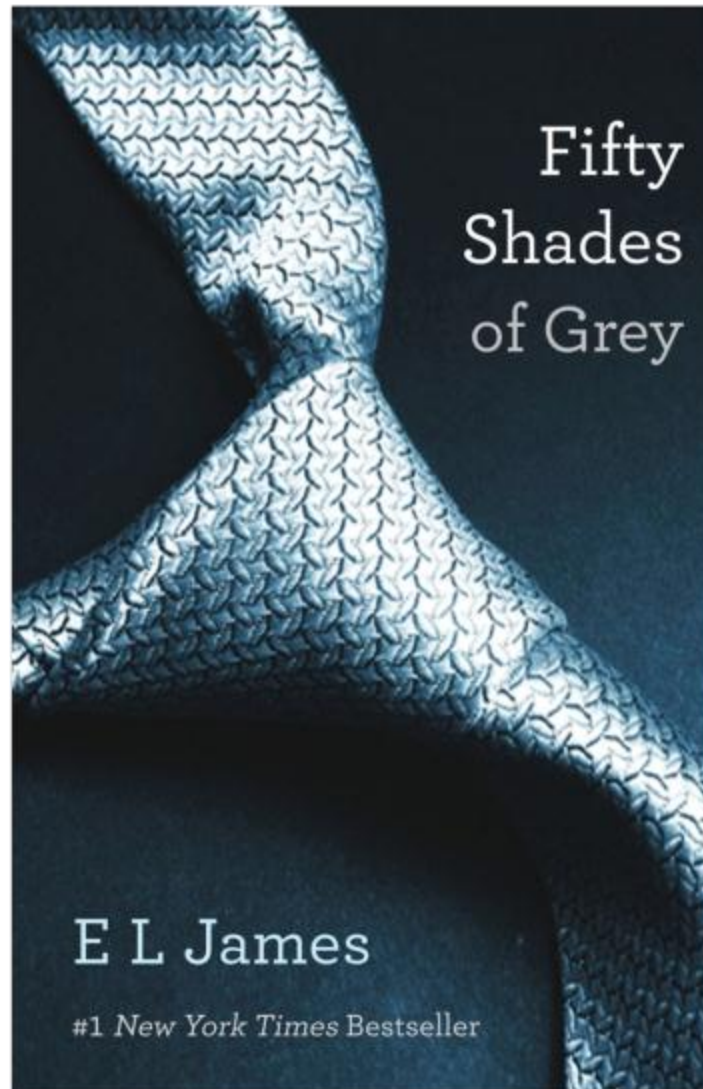
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The clinical utility of gynaecological investigations

Getting to grips with fifty shades of grey



Disclosure Statement

I am a Geek

I am also a risk management lead, work in private practice and am a paid consultant for medical device/technology companies

The clinical utility of gynaecological investigations

How it changes management

- Help with diagnosis
- Help decide management options

Key Factors

- Association between the test results and the disease
- The likelihood of the disease before the test
- The person ordering the test
- The patient

Association between the test results and the disease

- Accuracy of the test
- Quality of the test
- Relevance of the test

The likelihood of the disease before the test

- More likely diagnosis = easier to confirm
- Less likely diagnosis = easier to exclude

The person ordering the test

- Demand for certainty
- Tolerance of risk
- Knowledge of disease
- Knowledge of test

Other considerations

- Importance of disease
- Cost/availability of the test
- Risks of the test
- Alternative tests

Pre-suppositions

- History
- Examination
- Differential Diagnosis
- Defined Goals (ICE)

Specific situations

- Early pregnancy
- Abnormal vaginal bleeding
- PCOS
- Pain

Early Pregnancy

- Clinical assessment v. limited
- Ultrasound essential
- ? role of HCG

Ultrasound

- Accurate diagnosis of ectopic pregnancy regardless of gestation and HCG
- Confirmation of viability
 - Unreliable before 7 weeks
 - Iatrogenic pregnancy loss

New criteria

- MSD 25mm (from 18mm)
- CRL 7mm (from 5mm)
- Increased interval between scans 1-2 weeks

HCG

- Useful when clinical assessment and ultrasound are non diagnostic
- Serial measurements more helpful
- Caution with interpretation
 - Slow rising in 'normal' pregnancies
 - 'thriving' ectopics

“The Pygmalion Effect”



Abnormal bleeding

- Postmenopausal bleeding
- The rest

Cancer risk

- Age
- Obesity
- Unopposed oestrogen
- Nulliparity
- NIDDM

Postmenopausal bleeding

- Clinical examination
- Endometrial biopsy
- Ultrasound
- Hysteroscopy

Endometrial cancer

test +

test -

- | | | |
|--------------------------|-----|----|
| • Endometrial biopsy | 88% | 2% |
| • Ultrasound
(ET 5mm) | 18% | 1% |
| • Hysteroscopy | 87% | 2% |

- Ultrasound readily available in the community
- Pipelle safe in the hands of a trained GP
- Gynaecologists like hysteroscopies
- Does community management prevent hysteroscopies?

Other bleeding issues

- Risk of malignancy much lower
- Obesity key risk factor
- Patient centred goals
- Investigation vs treatment

Other bleeding issues

- Clinical assessment
- Bloods
- Endometrial biopsy
- Ultrasound
- Swabs

Ultrasound

- Significance of 'benign' pathology?
- Does it influence treatment?
- “theory-practice gap”
- Mirena

PCOS

- History
- Biochemistry
- Ultrasound

PCOS

- Management is symptom based

Pain

- Acute vs Chronic
- Clinical assessment
- Goals
- To investigate or not to investigate

- Swabs
- Bloods
- Ultrasound
- Laparoscopy

Pitfalls of clinical investigations

- False positives
- False negatives
- Incidentaloma

Incidentaloma

AKA 'vomit'

- Victims Of Medical Imaging Technology

ovarian cysts

endometrial polyps

Ovarian cysts

- Come and go in pre-menopausal women
- Present in 15% of dead postmenopausal women
- ? Significance

Tumour markers

- Unreliable in younger women and early stage cancer

- Risks from unnecessary intervention
- Cost of further evaluation and follow up
- 'Nocebo' effect

Why was the scan done in the first place?

Endometrial Polyps

- ? Significance
- Risk of malignancy if postmenopausal
 - 1-2% asymptomatic
 - 4-5% symptomatic

Does treatment whilst asymptomatic improve outcome?

sensitivity 0.64, specificity 0.87

PPV 0.45, NPV 0.94

intermenstrual or postmenopausal bleeding:

sensitivity 0.8, PPV 0.61

heavy or frequent menstruation:

sensitivity 0.33, PPV 0.31

asymptomatic women

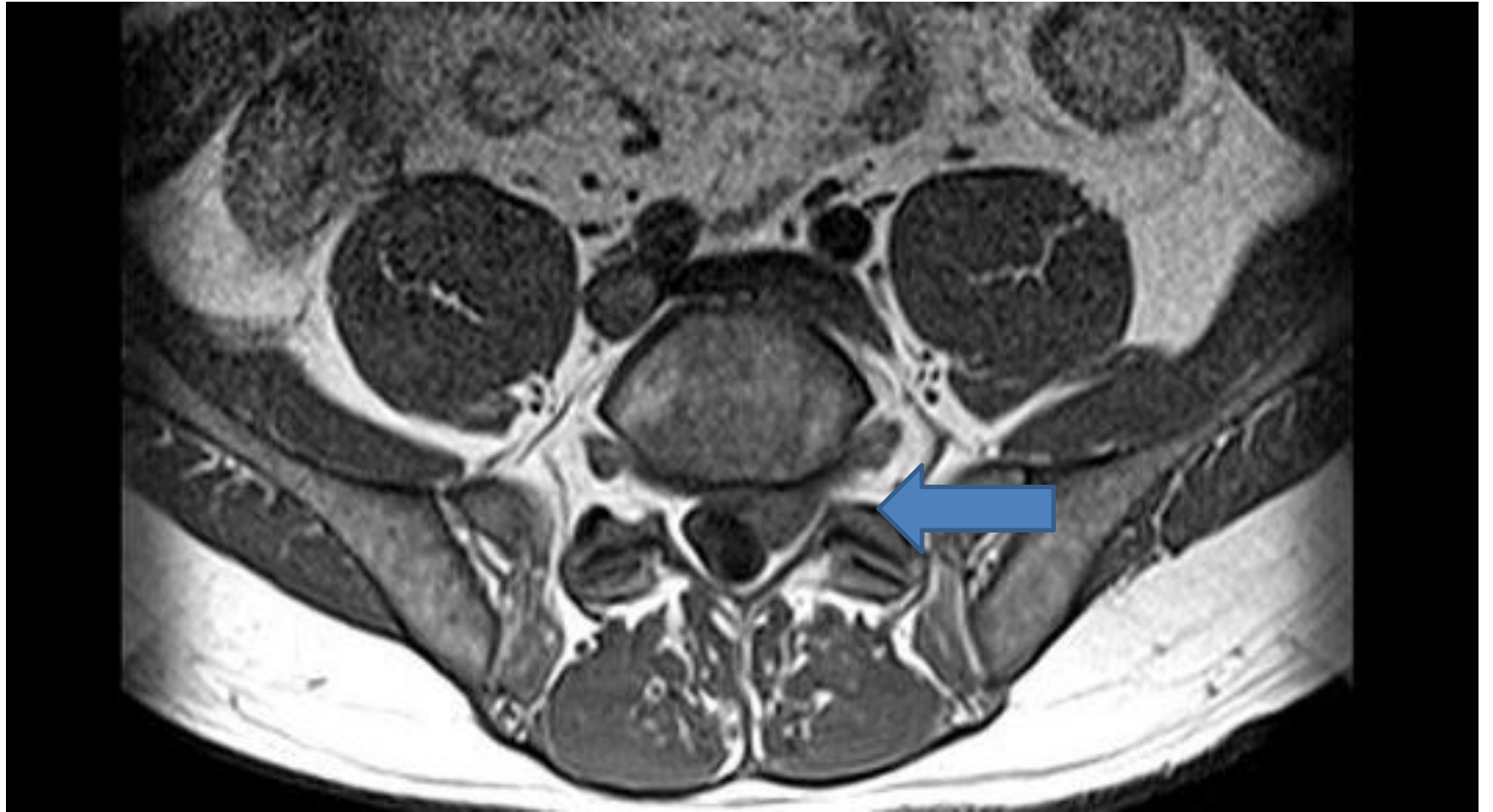
sensitivity 0.5, PPV 0.25

- Ultrasound diagnosis of polyps frequently leads to negative hysteroscopy
- Sometimes best not to do the scan in the first place?

Saline Infusion Sonography



- Greater accuracy
- Does it change management?





Summary

Investigate (and treat) the patient not the pelvis