



Is she pregnant? Pregnancy status in women undergoing scans with ionising radiation at DGRI

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INTRODUCTION

Case reports and investigations following nuclear accidents in Japan and Chernobyl highlight main consequences of radiation in pregnancy as pregnancy loss, malformation, disturbances of growth or development and mutagenic and carcinogenic effects. Ionizing Radiation (Medical Exposure) Regulations state that it is the responsibility of both the practitioner and operator to ensure that the pregnancy status of women of reproductive age (12-55 years) is determined prior to investigations with ionizing radiation.

AIM

To assess whether appropriate means of exclusion of pregnancy are carried out and documented in women of reproductive age exposed to ionising radiation prior to their investigations.

METHODS

INCLUSION CRITERIA

- Inpatients in ED, CAU, Medical and Surgical wards
- Imaging from 29/01/21 – 28/02/21
- Women aged 16-55 years
- X-rays – Chest, Abdomen, Lumbar/ Thoracic spine
- CT – Chest/ Abdomen/ Pelvis, Urinary Tract, Pulmonary Angiogram and Angiography

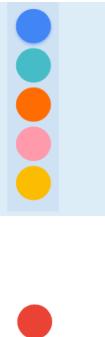
EXCLUSION CRITERIA

- GP and Clinic requests for imaging
- Patients aged <16 years or >55 years
- Imaging with ionizing radiation out with 'nipples to knees' range
- No availability of electronic case notes

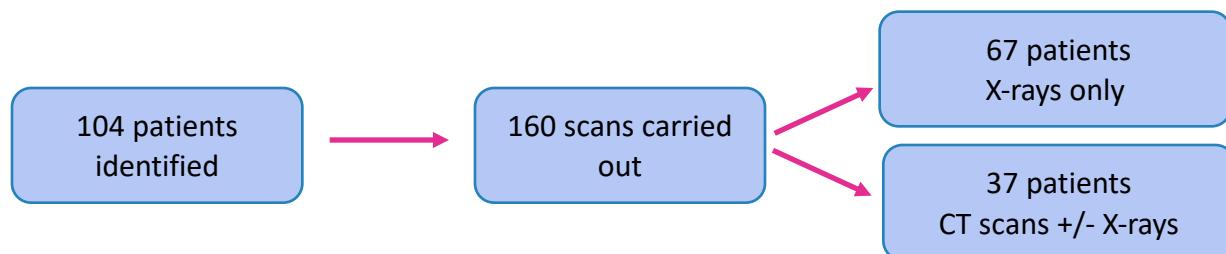
- We considered that pregnancy had been excluded if one or more of the following had been documented in the notes before imaging took place

- Hysterectomy/ Sterilisation
- Menopause/ Pregnant
- Contraception
- Documentation LMP
- Urine/ serum HCG

If none of these applied we classified as 'Not Documented'

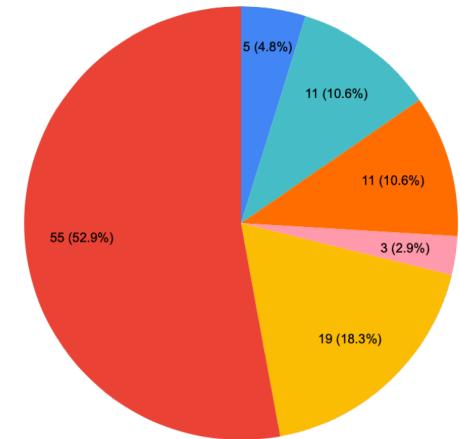


RESULTS



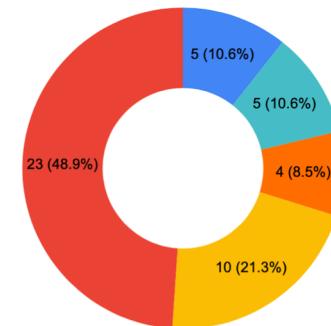
Documentation of pregnancy status based on types of scans

	X-Ray only	CT +/- X-ray
Number of scans	67	37
Documentation rate	32 (48%)	17 (46%)
Hysterectomy/ Sterilisation	3	2
Menopause/ Pregnant	8	3
Contraception	7	4
LMP	2	1
HCG	12	7

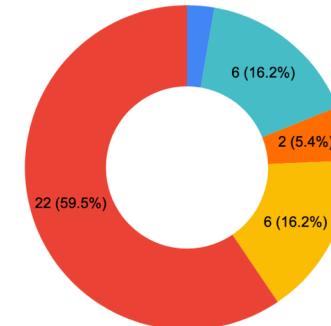


Documentation of pregnancy status – comparison by department

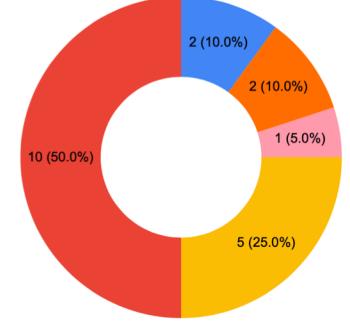
Emergency Department



Medicine



Surgery



SUMMARY

- ✓ Pregnancy status was only documented in 47% of cases on average across all types of imaging modality.
- ✓ Lack of documentation was consistent across Medicine (59.5%), Surgery (50%) and ED (48.9%).
- ✓ The most commonly documented mode of exclusion of pregnancy was a urinary or serum Beta-HCG.

RECOMMENDATIONS

Women aged 17-55
Have you excluded pregnancy?
If so, how?

- ✓ A sticker has been introduced in the medical and surgical clerk-in booklet
- ✓ Plan to re-audit following this with view for permanent section in medical and surgical clerk-in booklet.