

Radiation Protection Advice & Guidance no 8

PATIENT PREGNANCY IN DIAGNOSTIC PROCEDURE^a

RPAG 8 Summary

For high dose (> 1 mGy) examinations of the pelvic area of a pregnant woman there is a non-trivial risk of inducing childhood cancer in the foetus. Therefore, the precautions below should be followed.

1) Introduction

- In all women of reproductive capacity, the clinician requesting the examination should consider the possibility of pregnancy.
- There is no risk to the conceptus following irradiation during the first 10 days of the menstrual cycle. However, in the interval between 10 days and the date at which the next menstrual cycle is due there is a small risk for high dose procedures such as pelvic or abdominal CT and barium enemas.
- If a foetus has been inadvertently exposed, the Radiation Protection Adviser should be informed. He can then provide a dose and risk estimate.
- At diagnostic dose levels, the only adverse effect of radiation on the conceptus is an increased risk of cancer induction. Dose levels are too low to induce death or malformations. Therefore, invasive foetal diagnostic procedures or termination of the pregnancy are not justified.
- The accompanying flow diagram indicates the general procedure to be followed. Where necessary Local Rules should give any specific requirements for particular work areas.
- The superintendent radiographer is responsible for ensuring that all staff are familiar with the correct procedure, and that normal good radiographic practice is carried out to ensure that radiation doses are kept as low as is reasonably achievable.

^a Same requirement as in HEY Hospitals Health & Safety at Work Policy CP137 (4/12/09) section 12.7

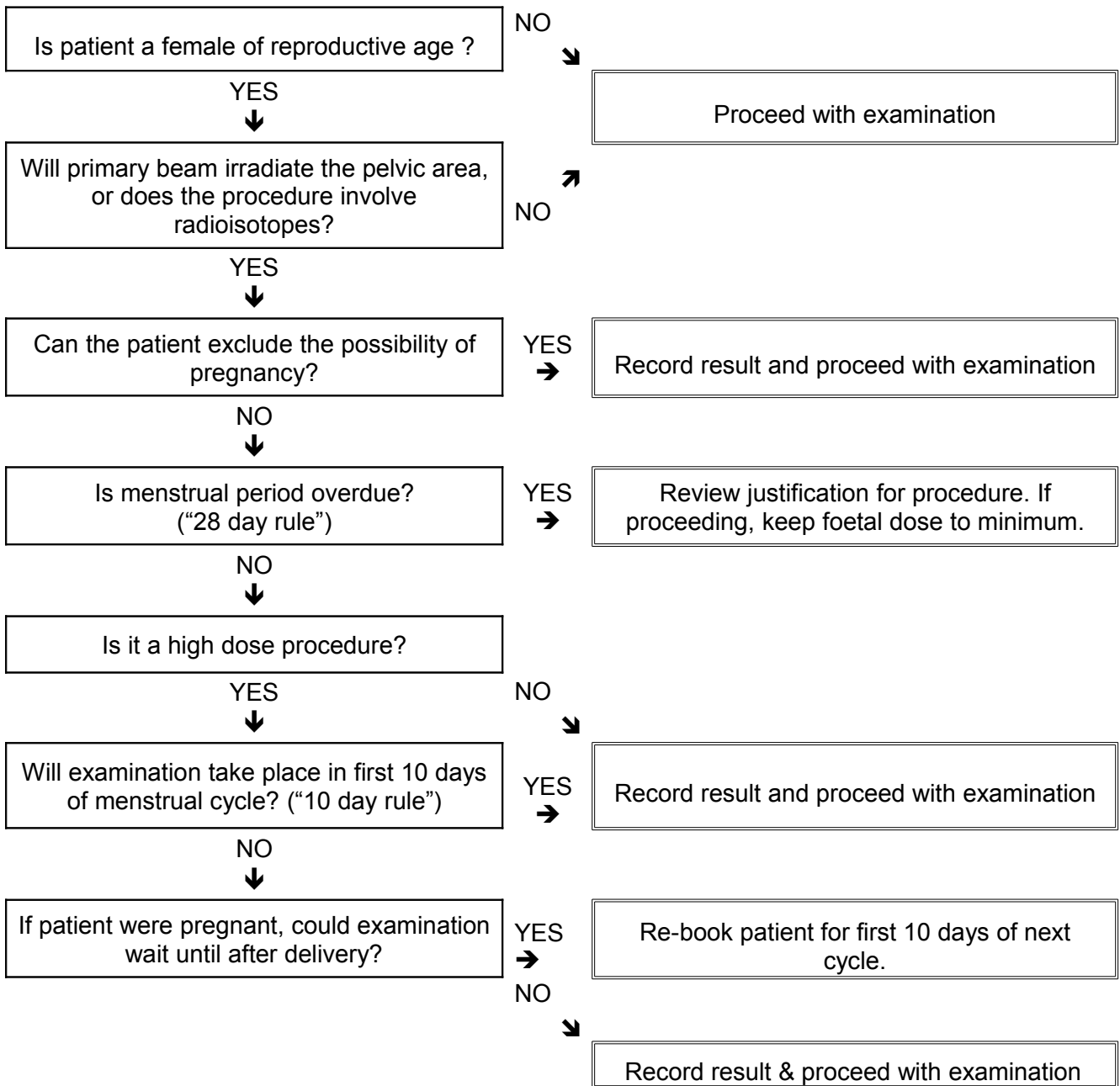
2) Particular Advice on Establishing Whether Patient May Be Pregnant

- In order to ensure that the examination is carried out within 28 days of the last menstrual period (LMP) patients should be asked, "*Are you or may you be pregnant?*" or "*Is your last menstrual period overdue?*" To assist in obtaining correct information the following precautions should be taken:-
 - a) Advisory notices should be prominently displayed in X-ray departments.
 - b) X-ray request forms should have a space to allow for insertion of the LMP by the referring clinician.
 - c) The examining operator (*e.g. radiographer, medical physicist or technician*) to check the dates of LMP especially if there is a long delay between request and exposure.
- If the operator does not obtain satisfactory assurance the request should be referred back to the requesting clinician or department, or to a radiologist.
- This advice may be ignored in the following cases:-
 - a) Women who have been on the contraceptive pill/implant/injection for three months or more, or have an IUD fitted.
 - b) Women who have been sterilised.
 - c) Nuns.
 - d) Women who are outside the age range of 12 - 50 or are post menopausal.

3) Latest national guidance

"Protection of Pregnant Patients during Diagnostic Medical Exposures to Ionising Radiation" RCE 9, Health Protection Agency / Royal College of Radiologists / College of Radiographers. March 2009 (http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1238230848746)

4) General Procedure To Prevent Unnecessary Exposure Of The Foetus



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Changes since last version (2001)

Layout only. Reference to new radiation section of Hull & East Yorkshire Hospitals Health & Safety at Work Policy.