Statistical background and risk

Facts and figures about pregnancy in under 16s

Whilst over a third of females will have been sexually active by the age of 16[1], the likelihood of a patient aged 12-15 being pregnant is small but tangible (see figs 1 and 2). The conception rate for U16s has fallen in recent years and is around 7 per 1000 in England Wales and Scotland[2] with nearly 75% of these pregnancies falling in the 15-year old age group and around 60% leading to legal abortion.

Figure 1: Conceptions and outcomes in England

Year	Conceptions (number)	Rate per 1,000 females age 13-15	Aborted (%)
2010	6,256	7.0	62.8
2009	6,756	7.5	60.2
2008	7,123	7.8	61.8

Source – ONS

Figure 2: Prevalence of U16 conception by age (data from Scotland, 2009)

Age	Number	Rate per 1000 females in age group
13	26	0.9
14	157	5.4
15	448	14.8
Total U16	631	7.1

Source - Scottish health statistics

Estimating the numbers of pregnant females under 16 undergoing clinical procedures is difficult and relies on assumption and extrapolation using limited available data. The table below (Fig 3) shows surgical activity for this age range.

Figure 3: Surgical procedures on female population aged 12-15 years in England

Age	2009/2010			
	Elective	Emergency	Other	Total
13	11,442	2,644	90	14,176
14	12,485	2,868	242	15,595
15	13,918	3,273	936	18,127
Total	47,864	11,460	1,340	60,664

Source - CHIMAT

Given the prevalence of conception, abortion rate and numbers undergoing any (high or low risk) operative procedure, in the region of 2-300 young women a year in England may present for surgery with a wanted pregnancy and a large proportion of these may declare their status through routine enquiry.

It is important to note that to date there have been no reported incidents, legal cases or awards where an undisclosed pregnancy in a female under 16 receiving treatment has resulted in harm or risk to the fetus. In 2010 CQC noted[3] one report under the Ionising Radiation (Medical Exposure) Regulations 2000 for England and Wales relating to pregnancy status and indicated that CQC 'hopes that Professional Bodies can develop guidance in this area'.

Determining the risk of a procedure

Whilst pregnancy enquiries, should continue as at present for all females in line with IR(ME)R, NICE, etc there are certain procedures which have a higher risk for an unidentified fetus and therefore it is appropriate to require absolute confirmation of pregnancy status Examples of procedures which would be categorised high risk are as follows (note this list is not exhaustive and should be agreed locally by clinical teams):

Risk	Type of Procedure	Details
High	Surgical Procedures	Abdominal surgery Gynaecological surgery Any intra-peritoneal operation including laparoscopy Scoliosis/lumbar posterior correction and fusion surgery (due to radiological positioning techniques) Cardiac Surgery Cardiopulmonary bypass Transplantation Renal dialysis access Renal Biopsis
High	Diagnostic testing for abdominal pain	Possible ectopic pregnancy
High	Cancer treatments	Chemotherapy – all treatment planned for an episode of disease.
High	Radiological procedures (see Protection of Pregnant Patients during diagnostic medical exposures[3])	X-ray Barium enema X-ray Intravenous urography X-ray and CT Lumbar spine CT of abdomen ^{99m}Tc Bone scan, ^{99m}Tc Cardiac blood pool scan ^{99m}Tc myocardial scan ^{99m}Tc cerebral blood flow scan (Exametazine) ^{99m}Tc Renal scan (DTPA) ^{201}TI Myocardial scan ^{18}F PET tumour scan CT pelvis, pelvis and abdomen CT pelvis abdomen and chest ^{99m}Tc myocardial (SPECT rest-exercise protocol) ^{18}F PET/CT whole body scan Nuclear medicine including the use of radio-iodine for thyrotoxicosis Radiotherapy, fluoroscopy
High	Cardiology	Angiography and cardiac catheterisation due to X-ray dosage and image intensifier use
Medium	Colonoscopy and endoscopy	Risks not proven, local policies may be in place

Anaesthetic procedures

It is difficult to quantify the risks of general anaesthesia in absolute terms as the combination of pregnancy-related physiological changes, anaesthetic drug administration, immobility and the procedure together with any co-morbidities collectively raise or reduce the potential risk of a procedure. Modern anaesthetic drugs used in routine practice are considered safe during pregnancy. Long-term use of benzodiazepines should be avoided due to an association with cleft lip and palate, but single doses associated with anaesthesia are safe. Regional anaesthetic techniques may reduce exposure to anaesthetic drugs, but may not be suitable for all younger patients.

See also: www.rcoa.ac.uk/pregnancy

1. 39% according to Parkes et al. J. Adolesce Health 2011 Jan: 48(1):27-35).
2. National Birth statistics, Scotland, comparators with England and Wales http://www.isdscotland.org/Health-Topics/Maternity-and-Births/Publications/2011-06-28/mat_tp_chart5.xls
3. IR(ME)R 2000 A report on regulatory activity in 2010 CQC http://www.cqc.org.uk/sites/default/files/media/documents/irmer_ar_2010.pdf