

# Service Priorities and Programmes Electronic Presentations

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Conscious sedation in Interventional Radiology – a 33 months Audit and its implication on Department Policy and Patient Management

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# **Keywords:**

Interventional Radiology Sedation

### Introduction

Conscious sedation is not uncommon in endoscopic centers, minor operative theater, and wards to minimize patient discomfort during procedures. Previous large scale study done showed a substantial growth in the use of sedation in the last few years and majority of these procedures were conducted outside the operating theatre. The associated mortality and incidence of adverse event are low (0.007% and 0.64% respectively). Potential risk factors include advanced patient age, pre existing medical illness and the combined use of more than one sedative.

# **Objectives**

Our team aimed to review the sedation use in our Interventional Radiology Suite, so that improvement can be made accordingly.

# **Methodology**

All patients who underwent IR procedures in our department from 1st January 2010 to 30th September 2012 were identified. Ultrasound-guided breast, thyroid and prostate biopsies were excluded from the study because sedation is normally not given for these procedures. For those patients using sedatives, the patient demographic factors including age, the presence of any pre-existing morbidities and the procedure they have undergone were obtained from the electronic patient records. The type and dosage of sedative use was obtained from the dangerous drug record.

#### Result

Out of a total of 1821 patients, (13.2%) 240 patients required conscious sedation during IR procedures. During 2010, 2011 and 2012 (Jan-Sep), the rates of sedative use were 13.0%, 11.9% and 14.7% respectively. For the 240 cases, 194 were adult patients and 46 were pediatric patients. The age ranged from 1 to 95 years old (median: 63; mode: 80). Dormicum was used in 51 patients (21.25%), Fentanyl in 180 patients (75%) and the combined use of the two in 9 patients (3.75%). The 3 most common procedures requiring sedatives were percutaneous transhepatic biliary drainage (PTBD) (34%), upper limb angioplasty (20.9%), and cholecystostomy (13.5%). A reduced dosage used in patients with liver or renal impairment in accordance with pre-existing guideline. Conscious sedation is effective in reducing

patients' anxiety and pain during interventional radiology procedures. Radiologists and nursing staffs were updated about the pros and cons of sedatives use, hoping to balance the risk of conscious sedation and minimize patients' discomfort. The standard regimen for sedative administration in our department was modified according to the audit result. It helps to facilitate patient preparation and improve workflow.