

Commentary on “Society of Interventional Radiology Quality Improvement Standards for Image-Guided Percutaneous Drainage and Aspiration of Abscesses and Fluid Collections”

Gregory C. Makris^{1,4}  · George Malietzis^{2,4} · Raman Uberoi^{3,4}

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Image-guided interventions for the management of abnormal fluid collections particularly abscesses have become one of the most common and important interventions undertaken by the interventional and diagnostic radiologists with increasing demand due to their minimally invasive nature and high efficacy in removing the source of the infection. These procedures significantly improve outcomes for patients with reduced morbidity and mortality and have helped in reducing hospital costs by reducing the length of stay and the need for open surgery [1, 2]. The Society of Interventional Radiology (SIR) recently produced an update on their quality improvement (QI) standards for image-guided percutaneous drainage and aspiration of abscesses and fluid collection [3].

With the clinical effectiveness of percutaneous drainage ranging between 62–100% [3] it is not surprising that drainages are now considered as a first line treatment for abnormal fluid collections. However, the clinical governance framework around the procedure has been vague and this is where the SIR QI standards document can be extremely useful. In general, these procedures are not

considered technically challenging however at times they can be demanding even with the use of the latest innovations in Ultrasound and CT guidance and this is why the suggested success rates for diagnostic aspiration and curative or partial drainage are in the region of 89% and 76%, respectively. As highlighted by the SIR. Guidelines it should of course always be kept in mind that, although drainage can be the definitive treatment in the majority of patients, in certain conditions, the expectation of drainage is to serve as a “bridge” until definitive surgical treatment can be offered examples of this include gall bladder empyema, appendicitis, inflammatory bowel disease and acute severe pancreatitis.

Percutaneous drainages are considered a relatively low risk procedure; however, there are significant potential complications which the patients should always be informed about including possible sepsis, haemorrhage, bowel or solid organ injury and pneumothorax for chest-based collections. According to the SIR QI standards document [3] accepted sepsis rates should be < 4%, haemorrhage requiring transfusion being < 8% and the incidence of bowel or pleural transgression being < 2%. Overall and probably, rather generously, all major adverse events resulting from adult and paediatric percutaneous drainage procedures should be below a suggested threshold of 15%. Of course this figure can vary depending on the complexity of the underlying target lesion (depth, surrounding organs and anatomy) as well as with regards to the relevant comorbidities. To ensure the best outcomes for these patients, in terms of clinical success and achieving low complications, it is vital to have good protocols and pathways for communications with all clinical partners with co-responsibility for managing these sometimes very ill patients. These protocols should detail the full treatment

✉ Raman Uberoi
Raman.uberoi@ouh.nhs.uk

¹ Vascular and Interventional Radiology Department, Guy’s and St Thomas’ Hospital, NHS Foundation Trust, London, UK

² General Surgery Division, Imperial College of London, London, UK

³ Department of Vascular and Interventional Radiology, Oxford University Hospitals, NHS Foundation Trust, Oxford, UK

⁴ Alfa Institute of Biomedical Sciences, Neapoleos 9, Marousi, Athens, Greece

plan including any planned post drain surgery, the post drainage procedure instructions and of course the how and where these patients are to be managed and what to do if things go wrong.

From our own local experience we can agree with the SIR document [3] that if measures such as indications or success rates fall below a threshold, or when adverse events exceed a threshold, a thorough review should be performed to determine causes and to implement changes if necessary. This approach of standardizing expected outcomes is essential in order to ensure that our patients receive the best possible care every time they have an image-guided intervention.

Compliance with Ethical Standards

Conflict of interest The authors declare that they have no conflict of interest.

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