

SHORT ABSTRACT

Tips and Tricks: Biopsies and Drainages

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Keywords: Biopsy; drainage; abscess; viscera; imaging guidance

Image-guided percutaneous biopsy and abscess drainages are some of the most commonly performed procedures in interventional radiology. With advances in targeted therapies for oncology patients, physicians increasingly depend on the experience and skill of the interventional radiologist to acquire tissue specimens from body organs. Furthermore, percutaneous drainage of fluid collections has largely reduced the need for surgical interventions for infected deep-lying body collections.

Percutaneous abscess drainage and percutaneous biopsy are safe, effective, and widely used techniques for the diagnosis and treatment of patients with neoplastic disease or sepsis. Indeed, modern interventional radiology techniques and equipment allow image-controlled procedures. However, the increasing number and complexity of procedures mandates careful patient assessment, close examination of periprocedural factors, and judicious procedure selection to maximize patient benefit and minimize adverse outcomes. This presentation focuses primarily on techniques for the percutaneous access and drainage of difficult or complex abdominopelvic collections, but many of the techniques are applicable to percutaneous biopsy of lesions that are difficult to access because of the absence of a percutaneous window. We will discuss several image-guided techniques and modifications that allow

percutaneous biopsy and drainage of poorly accessible lesions.

Abscesses can be classified into three groups, organized by complexity, which affects success and failure rates. The unilocular and discrete abscess is the easiest to drain and is cured in >90% of cases. The medium-complexity abscess (i.e., abscesses that have a connection to the gastrointestinal tract) are cured in 80–90% of cases. An associated gastrointestinal communication may require an operation, but if surgery is performed after percutaneous drainage, the surgeon's task is simplified by operating in a uninfected bed. The most complicated abscess collections are, for example, intermixed pancreatic abscess/necrosis, infected tumor, and tenacious organized collections. The cure rate is no higher than ~80% and may be as low as 30–50%. Fortunately, most abdominal and pelvic abscesses are reasonably easy to access and amenable to percutaneous drainage. However, in some cases the collection may initially appear unsuitable for percutaneous drainage for several reasons: (1) inaccessible due to surrounding organs or difficult location, (2) thickened contents, and (3) cause of abscess.

Competing Interests

The author has no competing interests to declare.

How to cite this article: Loffroy, R. Tips and Tricks: Biopsies and Drainages. *Journal of the Belgian Society of Radiology*. 2018; 102(S1): 10, 1–2. DOI: <https://doi.org/10.5334/jbsr.1628>

Submitted: 25 August 2018

Accepted: 23 September 2018

Published: 17 November 2018

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