

- 2. Lui CY, Lam HS. Review of Ultrasound-guided Vacuum-assisted Breast Biopsy: Techniques and Applications. *Journal of Medical Ultrasound*. 2010;18(1):1-10. doi:https://doi.org/10.1016/s0929-6441(10)60001-x.
- 3. Fuchsjäger M, Morris E, Helbich T. *Breast Imaging*. Springer Nature; 2022.

If you want to learn more about vacuum-assisted biopsy, consult our web page

https://eu.bd.com/vab-guide/

Access for professionals

Videos, articles and useful resources on vacuum-assisted biopsy are available



Vacuum-assisted biopsy: percutaneous biopsy technique



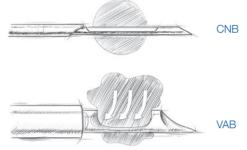






What is vacuum-assisted biopsy?

"Vacuum-assisted biopsy (VAB) is a percutaneous biopsy technique by which after local anesthesia, through a small incision in the skin, a special needle connected to a vacuum-generating device is inserted into the breast and a number of tissue samples are taken. The vacuum attracts the tissue towards the needle and a rotating device cuts the samples¹."



What are the advantages over conventional core needle biopsy?

"With Vacuum Assisted Biopsy (VAB) multiple samples can be taken sequentially without removing the needle, which is different to Core Needle Biopsy (CNB). In addition, the vacuum attracts the tissue towards the needle and a rotating device cuts the samples. This approach allows for rapid removal of much larger amounts of tissue in comparison to CNB, thus reducing (but not nulling) the risk of false-negative results or pathological underestimation¹."

"The high quality specimen obtained offers accurate histological diagnosis. It is also a recognized method of complete excision of benign lesions²."



... And over surgical biopsy?

"In practice, VAB, because of its safety, cost and efficacy, minimal complications, and high toleration from patients, is becoming even more widespread and represents, in most cases, a valuable alternative to open surgery³."

"The VAB procedure is faster, easier and more comfortable for patients compared with open surgical excision. VAB is a clinic-based percutaneous procedure using only local anesthesia, and usually takes only a few minutes to 20 minutes, while an open surgical procedure needs to be performed in an operating theatre, is usually under general anesthesia and takes longer²."



> The needle is being inserted into the breast.



When is it indicated?

VAB indications

"VAB main use is sampling of probably benign or suspicious, clinically palpable or non-palpable but imaging-detectable breast lesions. These can be sonographic abnormalities (such as a solid mass, a complex cystic mass, abnormal shadowing and distorted glandular lesions), or mammographic lesions (such as calcifications, mass or distortion), or magnetic resonance imaging detected mass or non-mass enhancing lesions²."

Technique of choice

"VAB is recommended over other biopsy techniques because of the larger specimen size which aids in reliable lesion categorization by pathologists²."

"VAB provides diagnostic samples of breast tissue for histological examination by partial or complete removal of the imaging abnormality. Its main use is sampling of probably benign or suspicious, clinically palpable or non-palpable but imaging-detectable²."

"The use of percutaneous VAB can reduce the need for open surgical biopsy or excision, and minimize costs of the operating theatre or hospital stays associated with surgical excision²."