

HOW TO PROBE A WOUND DURING ASSESSMENT TO HELP DETERMINE TREATMENT OPTIONS

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A simple wound probe during wound assessment can help determine the extent of the wound, its depth and whether it undermines or if there is a hidden sinus or tracking. The findings can help to determine appropriate treatment for the patient to optimise healing. This article explains the best way to carry out a wound probe and how to manage an undermining wound.

For any wound to be given a chance to heal, a thorough assessment must be undertaken in order to give appropriate care. Often little consideration is given to the extent of the wound — its depth, whether it undermines or if there is a hidden sinus or tracking.

If a wound has a small opening, rolled edges or appears to extend beyond what is visible to the eye, then it should be probed during wound assessment. This will determine the depth and extent of the wound.

There are a number of devices available to assist with the assessment, such as sterile plastic or metal probes, but some clinicians simply use a gloved finger. These methods have been known to cause discomfort, pain and trauma to the patient and



Figure 1. The wound has been probed with a wound swab.

the wound bed as they are rigid in nature with no protective soft cover to prevent wound trauma.

Instead, if the wound opening is big enough, it can be probed with a cotton swab or wound swab (Baronski and Ayello, 2004). The cotton bud tip and long handle will allow the wound to be probed around the edges, without causing any trauma or pain to the individual. When the cotton bud

tip comes into contact with tissue you will feel light pressure and you should not press any further as this is the wound edge. This can be measured by either marking the skin with a pen where the cotton bud tip has reached or you can measure it against a ruler. When probing a wound, always move the probe all around the wound to determine the true extent of tissue involvement.

If the wound opening is not big enough for a wound swab to pass through, but there is concern that the wound is undermining, a venflon cannula (with the needle removed) can be used to probe the wound. When the cannula comes into contact with tissue it will not go any further as it is too flexible and will bend on contact, unlike a finger or metal probe, and this will not cause trauma to the wound or pain to the patient.



Figure 2. The probe has uncovered how deep the wound is.



Figure 3. It is possible to move the swab in different angles to identify the true extent of the wound.



Figure 4. The wound has undermined.

Figures 1 to 4 show in sequence a small wound being probed with a wound swab. The swab can be moved around the wound to determine how far the tissue undermines.

A wound probe should also be employed in patients with multiple wounds if there is suspicion that they may be connected. Figure 5 clearly demonstrates a wound that has been probed and has revealed a connection to the patient's other wounds, forming a track. When selecting a dressing for a wound that has hidden depths, it is important that the dressing can fit into all the wound contours (Baronski and Ayello, 2004). However, care should be taken to prevent dressing loss. If the wound is a large or an undermining cavity, you may need to use more than one dressing. In this case you should record the number of dressings used in the patient's records to ensure that all dressings are removed at dressing change.

If the wound has a small opening which may lead to an underlying cavity and you are concerned that the dressing may become lost in the wound, tape the end of the dressing to the surrounding intact skin. This will also enable easy removal.

Figure 6 shows a very small wound to the sacrum surrounded by a number of large wounds. There was concern about this area as there was moderate exudate coming from it but no evidence of where it was coming from. After the wound had been probed using a venflon cannula, it was clear that the small wound connected to the larger adjacent wound.

When managing a wound that undermines, the aim is to heal from the bottom up. If the wound opening closes before the internal wound has healed it may lead to the development of a chronic wound which never truly heals but has periods of healing. You can try and prevent this from happening by packing the wound and ensuring that it remains open. This is not always successful and surgical review may be necessary.

Figure 7 shows two wounds to the abdomen. The sutured one has been probed using a venflon cannula and has been found to connect to the larger wound. The larger wound has also been probed using a wound swab to determine the extent of the undermined area.

By marking the area of undermining using a black marker you can see how far the wound extends. This will help decide which treatment options should be considered.

If you are concerned that the wound undermines to form a sinus or a fistula then you need to seek immediate medical advice.

Conclusion

If treating a wound which you suspect undermines it should be probed using one of the methods described above. The method selected will depend on the size of the wound opening. Select the appropriate dressing to optimise healing once you have successfully probed the wound and completed a full assessment. If the wound presents with either a fistula or a sinus, the patient should be referred for a medical review. **WE**

Baronski S, Ayello E (2004) *Wound Care Essentials, Practice Principles*. Lippincot Williams and Wilkins, Philadelphia



Figure 5. Probing reveals a tracking wound.



Figure 6. Probing reveals a small wound is connected to a larger adjacent wound.



Figure 7. On probing, a small sutured wound is revealed as being connected to a larger wound. The larger wound has also been probed and its boundaries marked on the skin with black pen.