

EVIDENCE BASED STATEMENT

DOMAIN **07**, Statement **5**
TOPIC: “**Biopsy in ulcer management**”

SEARCH TERMS & SOURCES

(biopsy) AND (venous ulcer)

INCLUSION CRITERIA

- Lower limb only
- Reviews
- Publication < 10 years, only ENG

SEARCH RESULT BEFORE - AFTER SELECTION

82/9

PERTINENT LITERATURE NOT IDENTIFIED BY THE LITERATURE SEARCH

1. Toussaint F, Erdmann M, Berking C, et al. Malignant Tumours Presenting as Chronic Leg or Foot Ulcers. J Clin Med. 2021 May 22;10(11):2251.
2. Baraldi C, Sacchelli L, Dika E, et al. Safety profile of chronic leg ulcer biopsy: a monocentric retrospective series. G Ital Dermatol Venereol. 2020 Jun;155(3):332-334.
3. Evidence-based (S3) guidelines for diagnostics and treatment of venous leg ulcers. J Eur Acad Dermatol Venereol. 2016 Nov;30(11):1843-1875.

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IDENTIFIED REFERENCES

1. Schneider C, Stratman S, Kirsner RS. Lower Extremity Ulcers. *Med Clin North Am*. 2021 Jul;105(4):663-679.
2. Alam W, Hasson J, Reed M. Clinical approach to chronic wound management in older adults. *J Am Geriatr Soc*. 2021 Aug;69(8):2327-2334.
3. Bowers S, Franco E. Chronic Wounds: Evaluation and Management. *Am Fam Physician*. 2020 Feb 1;101(3):159-166.
4. Dean SM. Cutaneous Manifestations of Chronic Vascular Disease. *Prog Cardiovasc Dis*. 2018 Mar-Apr;60(6):567-579.
5. Alavi A, Sibbald RG, Phillips TJ, et al. What's new: Management of venous leg ulcers: Approach to venous leg ulcers. *J Am Acad Dermatol*. 2016 Apr;74(4):627-40.
6. Reich-Schupke S, Doerler M, Wollina U, et al. Squamous cell carcinomas in chronic venous leg ulcers. Data of the German Marjolin Registry and review. *J Dtsch Dermatol Ges*. 2015 Oct;13(10):1006-13.
7. Kokkosis AA, Labropoulos N, Gasparis AP. Investigation of venous ulcers. *Semin Vasc Surg*. 2015 Mar;28(1):15-20.
8. Ramsay S, Cowan L, Davidson JM, et al. Wound samples: moving towards a standardised method of collection and analysis. *Int Wound J*. 2016 Oct;13(5):880-91.
9. Meaume S, Fromantin I, Teot L. Neoplastic wounds and degenerescence. *J Tissue Viability*. 2013 Nov;22(4):122-30.

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TEXT FOR INCLUSION IN THE DOCUMENT

DOMAIN 07, Statement 5 , TOPIC: “**Biopsy in ulcer management**”

Skin biopsies help to find a correct diagnosis in unclear or non-healing cases.

Malignancy in chronic ulcers has to be differentiated in primary malignant ulcers and secondary malignancy because of the transformation of a chronic wound into a malignant tumour.

The prevalence of malignancy in chronic leg ulcers in the literature ranges from 2.0% to 2.8% in retrospective analyses and 4% to 10.4% in prospective studies. The two most common types of ulcerating skin tumours are basal cell carcinoma (BCC) and squamous cell carcinomas (SCC). Biopsy can reveal also cutaneous leishmaniasis and Pyoderma gangrenosum

Because of its rarity, malignant tumours as a cause of chronic leg or foot ulcers are often overlooked. Initial misdiagnoses could lead to a delay in appropriate therapy management.

A biopsy should be performed in the absence of healing tendency after six weeks of treatment.

[Evidence-based (S3) guidelines for diagnostics and treatment of venous leg ulcers. (2016). *Journal of the European Academy of Dermatology and Venereology : JEADV*, 30(11), 1843–1875]

An elevated rim and excessive granulation have been found to be significantly more frequent.

Non-vascular ulcer cause usually are also associated to a vascular involvement, suggesting the need to perform a skin biopsy in case of suspect, even in the presence of a vascular disease.

***[Stansal A, Khayat K, Duchatelle V, et al. When to ask for a skin biopsy in a patient with leg ulcer? Retrospective study of 143 consecutive biopsies. *J Med Vasc*. 2018 Feb;43(1):4-9]**

In properly trained centers, skin biopsy demonstrated to be safe, presenting as main complication a dull pain and a rare risk of bleeding (0,23%).

[Baraldi C, Sacchelli L, Dika E, et al. Safety profile of chronic leg ulcer biopsy: a monocentric retrospective series. *G Ital Dermatol Venereol*. 2020 Jun;155(3):332-334].

Proper standardization and global validation of the biopsy technique is still missing in the literature.

[Ramsay S, Cowan L, Davidson JM, et al. Wound samples: moving towards a standardised method of collection and analysis. *Int Wound J*. 2016;13(5):880-891].

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STATEMENT FOR PUBLIC EVIDENCE-BASED AWARENESS

DOMAIN 7, Statement 5

In case of atypical appearance a biopsy must be performed to exclude malignancy, vasculitis or arterial sclerosis.

4SELECTED REFERENCES

1. Evidence-based (S3) guidelines for diagnostics and treatment of venous leg ulcers. (2016). *Journal of the European Academy of Dermatology and Venereology : JEADV*, 30(11), 1843–1875
2. Stansal A, Khayat K, Duchatelle V, et al. When to ask for a skin biopsy in a patient with leg ulcer? Retrospective study of 143 consecutive biopsies. *J Med Vasc*. 2018 Feb;43(1):4-9
3. Baraldi C, Sacchelli L, Dika E, et al. Safety profile of chronic leg ulcer biopsy: a monocentric retrospective series. *G Ital Dermatol Venereol*. 2020 Jun;155(3):332-334
4. Ramsay S, Cowan L, Davidson JM, et al. Wound samples: moving towards a standardised method of collection and analysis. *Int Wound J*. 2016;13(5):880-891

identified LITERATURE BIAS

Lack of standardization in the biopsy protocols reported in the literature

SUGGESTED NEXT LINES OF RESEARCH

Head to head comparison among different biopsy protocols