Clinical Pearl: The Squeeze Maneuver

Plantar warts can be distinguished from calluses using the squeeze maneuver, a quick and easy method to diagnose plantar warts. This technique negates the need for an expensive diagnostic tool.

Martin N. Zaiac, MD; Stephanie Mlacker, BS; Vidhi V. Shah, BA; Brian J. Simmons, BS

Practice Gap

Warts may negatively impact a patient's quality of life, as they may cause not only discomfort and pain but also embarrassment and low self-esteem. Moreover, Ciconte et al¹ demonstrated that study participants with warts on their feet were more likely to report physical discomfort than those with warts on their hands. Therefore, plantar warts should be diagnosed promptly to allow for proper treatment.

Warts may be identified by viewing the dilated capillaries that lie on their surface, which appear as small black dots to the naked eye.¹ The formation of a plantar wart obliterates the normal plantar creases, thereby flattening the skin's natural markings. However, a plantar wart may appear clinically similar to a callus and both lesions typically form in pressure point areas, warranting the use of a tool that aids in its diagnostic evaluation.^{1,2}

Diagnostic Tools

Dermoscopy, a noninvasive tool that creates a microscopic visualization of lesions, is commonly used to distinguish dermatologic pathology if the clinical presentation overlaps with a similar lesion, such as a callus, corn, or plantar wart.^{1,3} However, there is another way of differentiating plantar warts from calluses using a simple 2-step clinical maneuver that we learned from Dr. Lewis Kaplan at the University of Miami.





A plantar wart before (A) and after undergoing the squeeze maneuver (B). The patient denied feelings of discomfort or pain.

Dr. Zaiac is from the Department of Dermatology, Herbert Wertheim College of Medicine, Florida International University, Miami Beach. Ms. Mlacker, Ms. Shah, and Mr. Simmons are from the Department of Dermatology and Cutaneous Surgery, University of Miami Miller School of Medicine.

The authors report no conflict of interest.

Correspondence: Stephanie Mlacker, BS, University of Miami Miller School of Medicine, Department of Dermatology and Cutaneous Surgery, 1475 NW 12th Ave, Miami, FL 33136 (mlackerstephanie@gmail.com).

CONTINUED ON PAGE 204

202 CUTIS®

CONTINUED FROM PAGE 202

Using the thumb or index finger, apply pressure at a perpendicular angle to the lesion on the sole of the patient's foot, which will not create substantial discomfort or pain in a patient who has a plantar wart (Figure) but will be painful in a patient who has a callus due to the underlying bony spur. The next step involves applying pressure to the left and right sides of the lesion by squeezing toward the center with the thumb and index finger at a 45° angle. This maneuver will create substantial discomfort and pain in patients with plantar warts, thus helping to confirm the diagnosis.

Practice Implications

Rarely, a plantar wart can progress to form a verrucous carcinoma if left untreated.² Thus, it is important to diagnose and treat plantar warts to avoid pain and potential complications. The technique discussed here, which we are coining as the "squeeze maneuver," allows for easy diagnosis and negates the need for an expensive diagnostic tool.

REFERENCES

- Ciconte A, Campbell J, Tabrizi S, et al. Warts are not merely blemishes on the skin: a study on the morbidity associated with having viral cutaneous warts. Australas J Dermatol. 2003;44:169-173.
- 2. Cardoso J, Calonje E. Cutaneous manifestations of human papillomaviruses: a review. *Acta Dermatovenerol*. 2011;20:145-154.
- 3. Bae J, Kang H, Kim H, et al. Differential diagnosis of plantar wart from corn, callus and healed wart with the aid of dermoscopy. *Br J Dermatol.* 2009;160:220-222.

Editor's Note

To submit a clinical pearl, contact our Editorial Office at cutis@frontlinemedcom.com.

204 CUTIS® WWW.CUTIS.COM