

**ПИСМО ДО РЕДАКТОРА
LETTER TO THE EDITOR****DERMATOSURGICAL PEARLS: YING-YANG FLAP FOR RECONSTRUCTION
OF A CIRCULAR DEFECT IN THE PRESTERNAL REGION****S. Kordeva¹, B. Okulmus¹, K. G. Tchernev Jr², G. Tchernev^{1,2}**¹Department of Dermatology and Venereology, Medical Institute of Ministry of Interior – Sofia²Onkoderma – Clinic for Dermatology, Venereology and Dermatologic Surgery – Sofia**ДЕРМАТОХИРУРГИЧНИ ПЕРЛИ: YING-YANG ПЛАСТИКА ЗА РЕКОНСТРУКЦИЯ
НА ОВАЛЕН ДЕФЕКТ С ПРЕСТЕРНАЛНА ЛОКАЛИЗАЦИЯ****С. Кордева¹, Б. Окулмуш¹, К. Г. Чернев-младши², Г. Чернев^{1,2}**¹Катедра по дерматология и венерология, Медицински институт на МВР – София²Онкодерма – Клиника по дерматология, венерология и дерматологична хирургия – София**Corresponding author**

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A 74-year-old male presented to the dermatology department with a primary complaint of a tumor formation located in the presternal region, slightly extending toward the left pectoral area, present for approximately three years. Over the past few months, the patient noticed a gradual increase in the size of the lesion.

Dermatological examination revealed a nodular lesion, elevated above the surrounding skin, with irregular borders and pink-to-brown pigmentation, with central hypopigmentation and fine desquamation (Fig. 1a). The lesion was clinically suspected to be basal cell carcinoma. Additionally, another lesion on the trunk was noted, also suspected to be basal cell carcinoma.

Under local anesthesia with 2% lidocaine, the lesion was excised with a 4-mm safety margin in all directions. The resulting primary defect was round, with exposed subcutaneous tissue (Fig. 1b). Given that the presternal region is prone to tension, primary closure would not have ensured tension-free final result. Secondary intention healing was also deemed unsuitable due to the prolonged healing time, increased risk of infection, and the poor esthetic and functional outcomes. Therefore, the team opted for a reconstructive approach using a double opposing rotation (Ying-Yang) flap. First, two opposing rotation flaps were designed, each approximately twice the length of the primary defect (Fig. 1b). The presternal region consists of relatively thick skin, which can endure significant mechanical stress. The vascular supply to this area is primary derived from the cutaneous branches of the superficial and deep branches of the internal

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mammary artery and the superior epigastric artery, while venous drainage is provided by the superior epigastric vein. Sensory innervation is ensured by the anterior medial cutaneous branches of the intercostal nerves. To preserve adequate vascular supply, flap elevation and careful dissection were performed down to the hypodermis, followed by undermining of the two opposing flaps. The resulting secondary defect had a S-shaped configuration, resembling a shuriken (Fig. 1c). After careful hemostasis, the opposing flaps were advanced and adapted in a tension-free manner. The secondary defect was closed using single interrupted 3-0 polypropylene sutures (Fig. 1d). At one-month follow-up, no complications were noted (Fig 2).

When opting for flap reconstruction, every dermatologist or reconstructive surgeon should carefully consider several key factors: 1) the location and size of the primary defect, 2) the direction and distribution of tension vectors, and the most suitable technique to manage them, 3) the expected esthetic and functional outcomes,

4) potential complications, and 5) when feasible, the opportunity to introduce innovation by adapting a technique not typically applied in that region. The double (bilateral) opposing rotation advancement (Ying-Yang) flap is a versatile reconstructive technique used to manage primary skin defects in anatomically challenging areas, such as the scalp [1]. Applying the Ying-Yang flap technique in areas outside the scalp is uncommon – for instance, it has been rarely reported for the correction of the male nipple hypertrophy [2]. The presternal region is typically reserved for other reconstructive techniques, as cases in this area often involve deeper or more complex structures than the skin alone [3]. In this case, the application of the Ying-Yang flap technique in the presternal region allowed for successful redistribution of tension vectors while preserving tissue viability and color match. Moreover, the esthetic outcome was favorable, with the final scar expected to blend seamlessly with the surrounding skin over time.

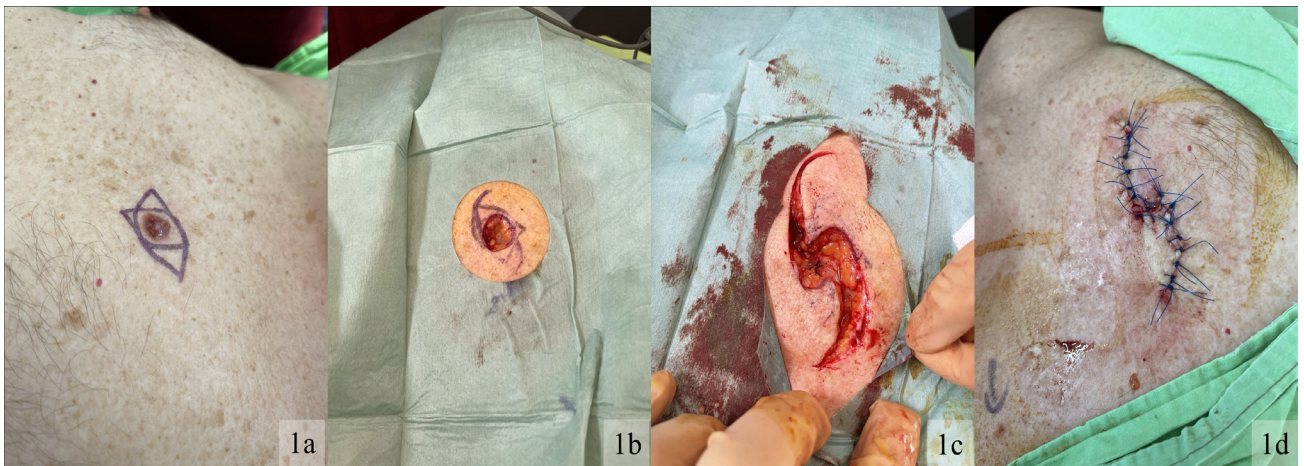


Fig. 1: Intraoperative view: **a:** A nodular lesion, elevated above the surrounding skin, with irregular borders and pink-to-brown pigmentation, with central hypopigmentation and fine desquamation. **b:** The resulting primary defect is round, with exposed subcutaneous tissue. The two opposing rotation flaps are designed, as each of them is approximately twice the length of the primary defect. **c:** The secondary defect had a S-shaped configuration, resembling a shuriken. **d:** The secondary wound defect is closed with single interrupted 3-0 polypropylene sutures.



Fig. 2: One-month follow-up

References

1. Tchernev G, Kordeva S. Dermatologic surgery rounds: double rotation (Yin-Yang) flap for reconstruction of a circular skin defect after BCC removal in the scalp region. *Dermatol Reports*. 2025 Jul 9. doi: 10.4081/dr.2025.10420. Epub ahead of print.
2. van den Berg W, van der Lei B. Ying-Yang flap technique for correction of male nipple hypertrophy: a case report and a review of the English-language literature. *J Plast Reconstr Aesthet Surg*. 2010 Dec;63(12):2194-6. doi: 10.1016/j.bjps.2010.04.036. Epub 2010 Jun 9.
3. Levy AS, Ascherman JA. Sternal Wound Reconstruction Made Simple. *Plast Reconstr Surg Glob Open*. 2019 Nov 27;7(11):e2488. doi: 10.1097/GOX.0000000000002488.