



How we do it: Songket suture technique for lying half cone dog ear

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ABSTRACT

Dog ear deformities in wound closure can lead to cosmetic concerns and discomfort for patients, particularly when there is unequal wound length, resulting in lying half cone-type dog ears. Managing these deformities involves aligning the longer side with the shorter side without extending the wound. The Songket suture technique, implemented in a two-stage process, has shown effectiveness in addressing this issue, especially in patients undergoing modified radical mastectomy with a crescent incision that we have presented.

Keywords: Songket suture, lying half cone, dog ear deformity

INTRODUCTION

Dog ear was initially defined by Limberg as a cone-shaped deformation of wound tissue (1). Dog ear formation post-surgical wound closure is primarily associated with cosmetic concerns, although patients may also experience pain and discomfort. The development of dog ears is influenced by factors such as the form of the lesion, its location, and the skin's elasticity (2).

Borgess further categorizes dog ears into two types: the most common type of dog ear is a standing full cone caused by excess tissue at both margins of skin excision, typically occurring when the wound's length to width ratio is less than 3:1; and the lying half cone, due to excess tissue on one side only, forms asymmetrical elliptical lesions with a noticeable length discrepancy between the two sides of the ellipse (Figure 1,2) (1,3).

How We Do It

Standing full cone type dog ear occurs when the elliptical incision line is too short, the treatment is just to extend the elliptical incision to the point where the dog ear can be removed (1,3). Unequal wound length is the main issue affecting the development of lying half cone-type dog ears. The main purpose of management is to adjust the longer side to fit the shorter side. In order to fix lying half cone-type

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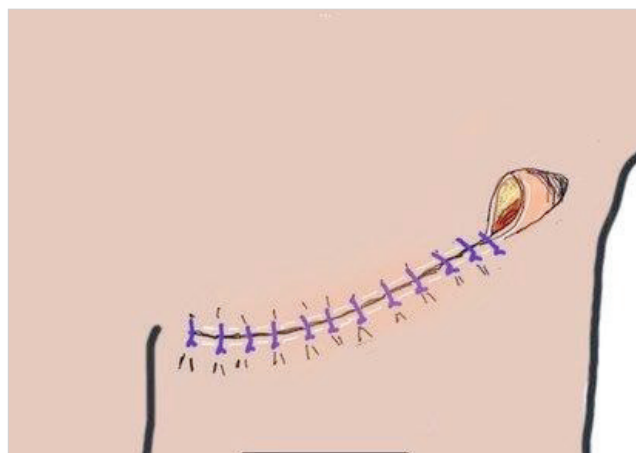


Figure 1. Full standing cone dog ear.

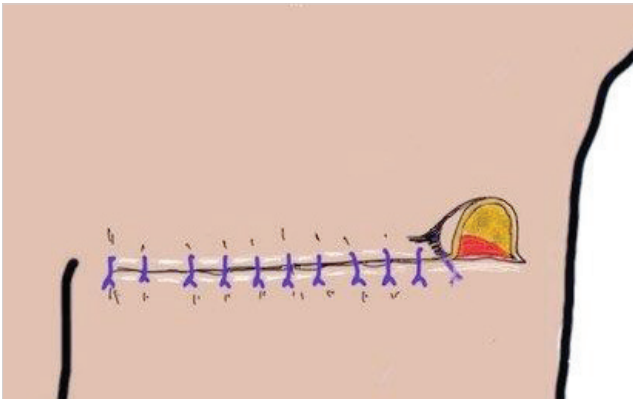


Figure 2. Half lying cone dog ear.

dog ears both functionally and attractively without extending the wound's length, we suggest using the Songket suture technique (4,5).

The stages of Songket suture technique are:

1. Rule of Halfs Pattern

The surgical wound closure technique relies on the rule of halves pattern to prevent dog ear at the wound's end. It occurs by determining the starting point of the suture (key suture) in the

middle of the shorter wound flap (minor curvature) and longer wound flap (mayor curvature) (Figure 3).

Once the initial key suture is formed, the remaining flaps of the major and minor curvature are used to establish the second and third key sutures, and so on, ensuring that there are no dog ears, as shown in Figure 4.

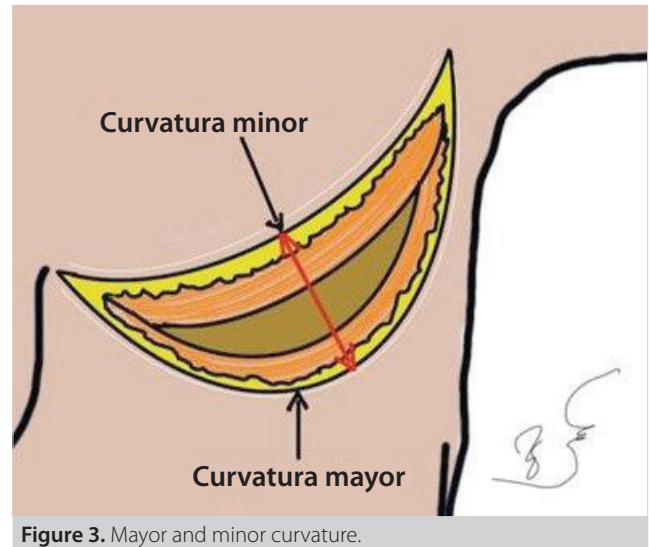


Figure 3. Mayor and minor curvature.

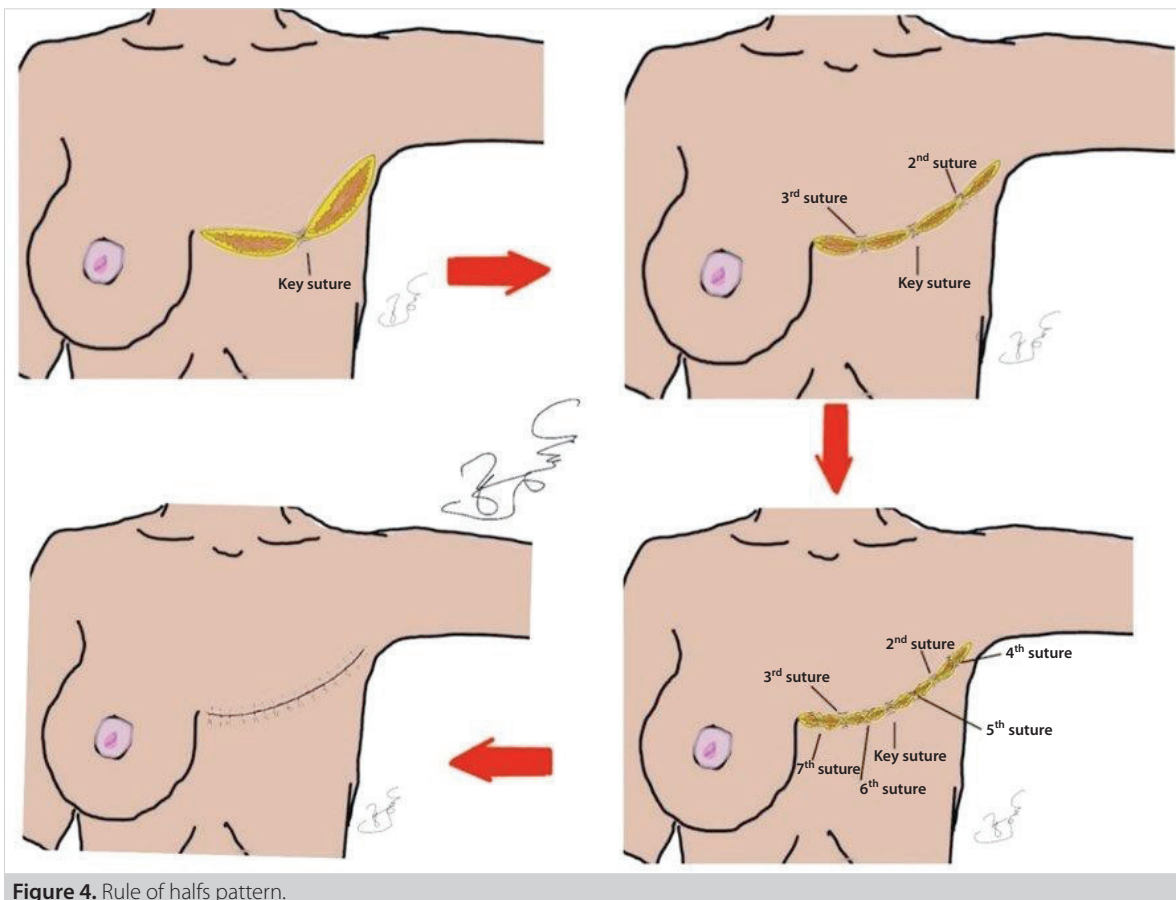


Figure 4. Rule of halves pattern.

2. Buried Mixed Mattress Suture

The wound suturing technique used is buried mixed mattress suture, which is a combination of buried horizontal mattress on the major curvature and buried vertical mattress on the minor curvature (Figure 5,6).

We applied this Songket suture technique on patients who had undergone modified radical mastectomy (MRM) using crescent incision, as shown in Figure 7.

CONCLUSION

Addressing dog ear deformities necessitates a comprehensive approach that considers wound characteristics, patient anatomy, and cosmetic goals. Utilizing the Songket suture technique, surgeons can effectively manage dog ears and enhance postoperative patient satisfaction.

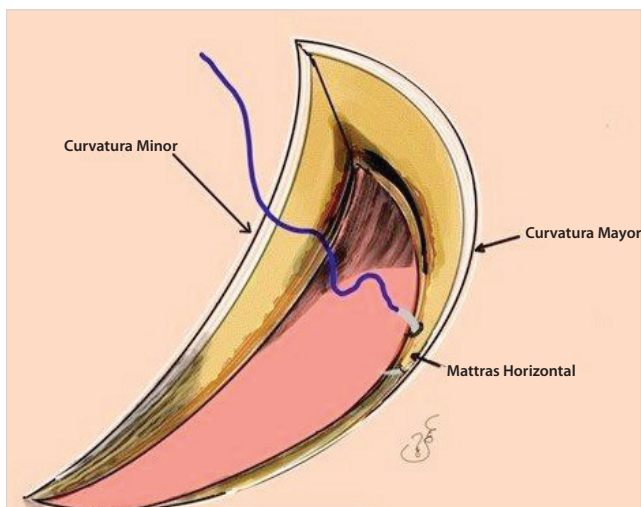


Figure 5. Buried horizontal mattress suture on the major curvature.

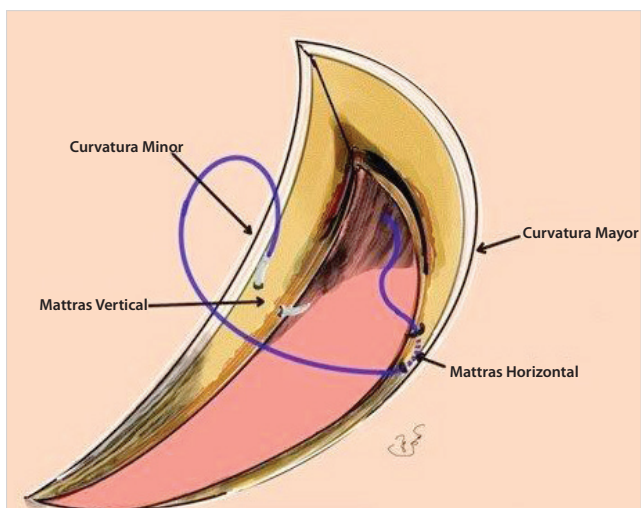


Figure 6. Buried vertical mattress suture on the minor curvature.



Figure 7. Result of Songket suture technique on patients whose performing MRM.

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**TEKNİK SUNUM-ÖZET**

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Nasıl yapıyoruz? Yarım konik köpek kulağı deformitesinde Songket dikiş tekniğiNur Qodir¹, Afifah Zulfa Salsabila², Muhammad Baharul Iman²¹ Sriwijaya Üniversitesi Tıp Fakültesi, Cerrahi Anabilim Dalı, Cerrahi Onkoloji Bölümü, Palembang, Endonezya² Sriwijaya Üniversitesi Tıp Fakültesi, Palembang, Endonezya**ÖZET**

Yara kapanmasındaki köpek kulağı deformiteleri, özellikle eşit olmayan yara uzunluğu olduğunda, hastalar için kozmetik kaygılara ve rahatsızlığa yol açabilir, bu da yarım konik tipi köpek kulaklarına neden olur. Bu deformitelerin yönetimi, yarayı uzatmadan uzun tarafın kısa tarafla hizalanmasını içerir. İki aşamalı bir süreçte uygulanan Songket dikiş tekniği, özellikle sunduğumuz hilal insizyonlu modifiye radikal mastektomi geçiren hastalarda bu sorunu ele almada etkili olduğunu göstermiştir.

Anahtar Kelimeler: Songket dikişi, yarım konik, köpek kulağı deformitesi**DOI:** 10.47717/turkjsurg.2024.6549