



ORIGINAL RESEARCH PAPER

Obstetrics & Gynaecology

COMPARISON BETWEEN MATTRESS AND SUBCUTICULAR SUTURE IN CHETTINAD HOSPITAL

KEY WORDS:

Amrutha Varshini
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Dr. Raja Kumar
Shery Angel

ABSTRACT

Aim: To compare the outcome between subcuticular and mattress suture in Chettinad Hospital for postnatal patients and adhere to practices that benefit of the patient. **Design:** Cross Sectional Study **Methodology:** **Sample Size:** 100 patients **Inclusion Criteria:** Post natal and gynecology patients. **Procedure:** The study is a questionnaire based study. The study population will be postnatal patients and gynecology who receive postnatal care in Chettinad Hospital. After getting informed consent, the procedure will be explained thoroughly to the participants and only the participants who are willing to take part in the study will be selected. The participants were observed on an outpatient basis and those who were admitted in the postnatal ward. They were asked to answer a questionnaire. The questionnaire contains questions related to the outcome of mattress vs subcuticular sutures and their complications such as wound infections, allergies, pain, serous and purulent discharge, scar dehiscence, stitch granuloma and wound recovery. This study is completely a non-invasive study. **Study Duration:** 2 Months **Results:** The study population included 100 participants who received postnatal care in Chettinad hospital. Majority of the patients were 20-35 age group. Out of them 50 were postnatal and 50 were gynae patients. Out of 50 postnatal patients 23 patients had mattress sutures and 22 patients had subcuticular sutures. Out of 50 gynae patients 15 patients had mattress suture and 35 patients had subcuticular suture. In the patients who had mattress sutures 6 had infection, 8 had early recovery, 1 had allergy, 25 had pain and 18 had serous discharge as opposed to subcuticular suture where 2 had infection, 15 had early recovery, 15 had pain and 5 had discharge. **Conclusion:** Subcuticular suture yields better results postoperatively than mattress sutures and complications like discharge, pain, allergies, wound infection and dehiscence was less in mattress sutures.

BACKGROUND

Repair technique significant role in keloid formation and development of hypertrophic scar and hyperpigmentation at the repaired site. The depth and extension of the wound as well as infection Suture type and technique are significant factors that may affect wound closure outcomes. The technique of closure should be quick, easy, cost effective and simple, while maximizing wound cosmesis and patient satisfaction. The ultimate goal of any skin closure technique is skin approximation and adequate healing with minimum wound complications like pain, infection, scarring, keloid formation. Most Caesarean sections are now performed using a transverse suprapubic (Pfannenstiel) incision. The transverse incision is generally believed to have superior strength and healing outcomes and may be less prone to infection than vertical midline incisions. However existing skin closure studies have been limited by study design and small numbers. The present study aims to compare two commonly used methods of skin closure i.e. mattress and subcuticular sutures to decide which among them is superior with regards to wound healing and cosmesis. The main reason for using vertical mattress sutures is to produce greater wound eversion. It also closes dead space and provides increased strength across the wound by incorporating a large amount of tissue within the passage of suture loops. Disadvantages include difficulty in approximating wound edges and prominent suture marks if the sutures are not removed sooner. Necrosis of skin beneath the externalized loops of the vertical mattress sutures has been noted when the knot is tied too tightly. In addition, the natural process of wound inflammation and scar retraction will pull loops of suture that lie on the skin surface downward. This pull results in small skin scars.

Subcuticular technique is useful when sutures should be in place for week but suture marks should not be visible. Advantages of Subcuticular sutures in young patients is that in them the skin is comparatively soft and supple so there is good healing tendency and also this technique helps in good cosmetic appearance. Patient compliance too is better with Subcuticular sutures

As a result a survey was conducted to compare outcome of subcuticular vs mattress suture in Chettinad Hospital.

METHODOLOGY

The study is a questionnaire based study. The study population will be antenatal patients admitted in a Tertiary Care Hospital. After getting informed consent, the procedure will be explained thoroughly to the participants and only the participants who are willing to take part in the study will be selected. The participants were observed in the antenatal ward and the postnatal ward during their stay in the hospital. They were asked to answer a questionnaire. The questionnaire contains questions related to the quality of Antenatal care in Chettinad Hospital, which includes topics like blood pressure measurement, blood test, urine test, informed on possible complications, treatment of any such complications, counseling on nutrition, patient - doctor confidentiality, mental counseling and advice on birth preparedness plan during pregnancy. This study is completely a noninvasive study.

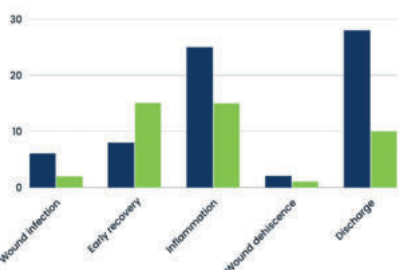
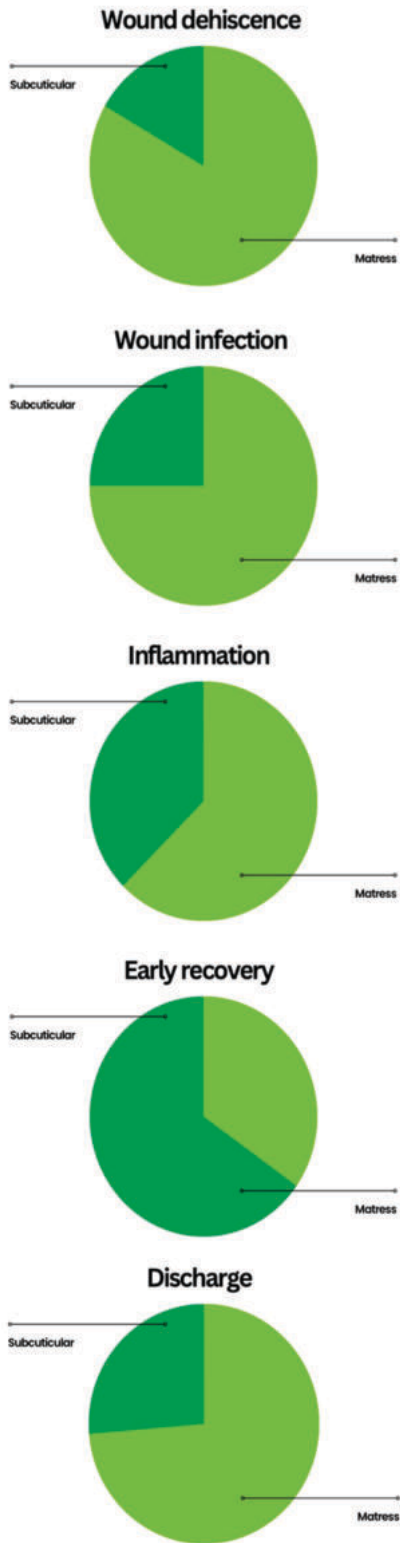
Sample Size: 100 patients
Inclusion Criteria: Postnatal patients

Ethical Considerations: Information obtained for the purpose of study will be completely kept confidential. None of the study participants will be harmed in any manner. The decision to withdraw from the study will be completely up to the participants, the required care will not be withdrawn.

RESULTS

The results of the questionnaire are as follows:

Complications	Mattress sutures	Subcuticular sutures
1. Wound infection	6	2
2. Early recovery	8	15
3. Wound dehiscence	5	1
4. Inflammation	25	15
5. Discharge	28	10



DISCUSSION

Subcuticular sutures are associated with a low rate of inflammation and wound infection. It also gives a cosmetically better scar. On the other hand, vertical mattress sutures are associated with a high rate of surgical wound complications like inflammation, infection, wound dehiscence etc. The cosmetic appearance too is not as good as the scar obtained after subcuticular sutures. Rail roading is seen with vertical mattress sutures.

CONCLUSION

Subcuticular suture requires more skill compared to mattress sutures but is cosmetically better and has lesser Post operative complications.

REFERENCES

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