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COMPARISON BETWEEN SYNTHETIC VICRYL & CHROMIC CATGUT ON PERINEAL REPAIR

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ABSTRACT

OBJECTIVE *To ascess the degree of pain and Dysparunia with Synthetic Vicryl and Chromic Catgut after Perineal repair.*
DESIGN *Single blind randomized controlled clinical trial.*
PLACE & DURATION OF STUDY *Department of Obstetrics and Gynecology Unit II, Abbasi Shaheed Hospital, Karachi from Jan, 2008 to June, 2008.*
PATIENTS & METHODS *200 women who had spontaneous vaginal delivery,after having on elective episiotomy or perineal tear were randomly allocated to repair with either synthetic vicryl or chronic catgut, and pain was observed on day 3 post partum and dysparunia after 3 months..*
RESULTS *Results were assessed in terms of pain on day 3 and superficial dysparunia after 3 months .20% patients experienced mild pain on day 3 with chromic catgut, whereas as only 14% experienced mild pain with vicryl. None of the patients had dysparunia.after 3 months .*
CONCLUSION *Continous suturing technique with either chromic catgut or vicryl is associated with less perineal pain and dysparunia .*

KEYWORDS 1. chromic catgut ,episiotomy ,perineal pain,vicryl

INTRODUCTION

70% of women need repair and stitching .Despite the high incidence of such repair, nobody monitors either the repair procedure or subsequent healing. Both short term and long term complication after child birth may have an affect on the amount of pain and dysparunia[1].

This study was undertaken to determine the effects of synthetic absorbable vicryl which is polyglactin, causes less tissue reaction and is absorbed by hydrolysis.. Chromic catgut is manufactured from collagen, is reported to cause an inflamatory response into the tissues as it is broken down by proteolytic enzymes and phagocytosis.

Absorbable synthetic material in the form of polyglycolic acid and polyglactin suture for perineal repair following child birth appears to decrease women's experience of short term pain after delivery[23].

This study was undertaken to determine the effects of absorbable synthetic suture vicryl and natural chromic catgut on short term perineal pain and dysparunia at 3 months, so as to enable the health care providers to use the most appropriate and cost effective suture material.

PATIENTS & MATERIAL

200 young women aged between 18 to 26 were randomly allocated to either synthetic vicryl or natural chromic catgut. The study was a single blind randomized controlled clinical trial carried out from Jan 2008 –June 2008 at the department of Gynaecology and obstetrics Abbasi Shaheed Hospital Karachi.

Following women were not included in the study.

- Any women, who was severely anaemic i.e Hb < (7.0 gms)
- Women whose membranes had ruptured more than 24 hours.and patients with foul smelling vaginal discharge.

SURGICAL TECNIQUE.

Continuous repair technique was used with both synthetic vicryl and chromic catgut.

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First stitch was applied above the apex of the vaginal mucosa_ followed by continuous, non locking sutures for the mucosa and the muscles and continuous subcuticular. stitches for the skin.

Local hygiene is important for good healing, as lochia is a means of culture for bacteria and every woman as a routine are explained about the importance of perineal hygiene and cleaning with soap and water[8]. A post graduate student blinded to the treatment undertook a face to face interview regarding pain using a visual analogue scale between 0-10 representing no pain and to severe pain, after 24 hours and 3 post partum day, All women were advised to come to antenatal clinic after 3 months for an assessment regarding dysparunia..

STATISTICAL

Analysis was performed by using SPSS version 8. Quantitative analysis was expressed as mean ± standard deviation, while qualitative variable were expressed as percentage.

RESULTS

A total of 200 women were included in the study, divided into group A,sutured with Chromic Catgut and group B sutured with Vicryl.

There was equal distribution amongst both the groups in terms of parity and, age, distribution and types of perineal trauma (table I) and (table II).

Regarding Table III indicating post-partum pain, as assessed by a visual analogue scale, representing,

'0' – mild pain

'5' – moderate pain

'10' – severe pain

Difference was noted, amongst the groups with mild pain on day 3, i.e. 20% had mild pain with chromic catgut and 1s4% with vicryl.

Regarding, dysparunia represented by table 4 shows no statistical difference between the use of chromic catgut or vicryl on superficial dysparunia after 3 months ,infact dysparunia was only revealed on direct questioning.

TABLE I.

Demographic Data

No.	Chronic A Catgut n=100	Vicryl B n=100
- Ages	20.2 ± 3.1	20.5 ± 3.2
- Parity Primigravida	52(26%)	48(24%)
Multigravida	48 (22%)	52 (26%)

TABLE II.

Perineal Injury

N=no of Patient-100	A Chromic Catgut	Vicryl B
Episiotomy	68 (34%)	66 (33%)
2nd Degree tear	32 (16%)	34 (17%)

TABLE III.

POSTPARTUM PAIN

Day 3	A - Chronic Catgut	B - Vicryl
Mild	40 (20%)	28 (14%)
Moderate	30 (15%)	28 (14%)
Severe	4 (2%)	2 (1%)

TABLE 4

Dysparunia

3 Months	A Chronic Calgut	B Vicryl
	NA	NA

DISCUSSION

Perineal repair after elective episiotomy or spontaneous laceration is one of the most common surgical procedures[23]. Factors associated with morbidity related to perineal traum, depends upon the technique of repair, choice of suture material, and the competence of the surgeon[10]. The general condition of the puepera.'s characteristics and general condition such as age, nourishment, influence the time and quality of healing .Studies indicate better results in cases of spontaneous laceration when compared to episiotomy with less suture layers to be repaired.

In our study, the development of healing process and the result observed on the 3rd postpartum day, regarding pain was not statistically different between the catgut and the vicryl group. Results – mild to moderate pain was reported by 20% and 15% respectively with chronic catgut and 14% and 14% by vicryl.Severe pain was reported by 4 patients(2%) and only 2 patients(1%) with vicryl, Comparison of esthetic results of perineal repair with both catgut and vicryl 6 weeks after delivery indicate that scar were totally indistingshable between both suture type, Study conducted in the department of obstetrics and gynecology, women and children division city general site UK., it was shown that it's the continuous suturing technique, which reduced pain on day 10. (1)

Superficial dysparunia was absent in both group A and group B, which is comparable to a study done by Kettle C and Johnson R Bin, UK, . A small Danish randomized control trial did not show any difference in short and long term perineal pain,after repair with vicryl or catgut[15.] Currently the types of suture materials, and its size is not the controversy, but there is much diversity regarding technique of suturing of perineal muscles.

CONCLUSION

It's the use of continuous suturing technique either with synthetic vicryl or chromic catgut which is associated with less short term pain, and superficial dysparunia.

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