

**GOVT. STANLEY MEDICAL COLLEGE & HOSPITAL,
CHENNAI – 600001
DEPARTMENT OF GENERAL SURGERY**

DISSERTATION TOPIC:

**“A COMPARATIVE STUDY OF 2-0 VICRYL VS 2-0
PROLENE FOR RECTUS CLOSURE”**

INVESTIGATOR:

DR. MADHURI SUDHAKAR,

POST GRADUATE IN GENERAL SURGERY

CO-INVESTIGATORS/GUIDES:

Prof.Dr.NAGARAJAN D .M.S.,

Dr.MALARVIZHI,M.S.,

Dr.RAJESHWARAN, M.S.,

Dr MADHUSUDHANAN, M.S.,

FROM

DR. D NAGARAJAN,

PROFESSOR,

DEPARTMENT OF GENERAL SURGERY,

GOVT STANLEY MEDICAL COLLEGE& HOSPITAL,

CHENNAI - 600001.

TO

HEAD OF THE DEPARTMENT,

DEPARTMENT OF GENERAL SURGERY,

GOVT. STANLEY MEDICAL COLLEGE& HOSPITAL,

CHENNAI –600001.

(THROUGH PROPER CHANNEL)

RESPECTED SIR,

SUB: PERMISSION REGARDING CONDUCTING THESIS TOPIC IN YOUR DEPARTMENT

I AM HEREBY REQUESTING YOUR PREMISSION TO CONDUCT A THESIS REGARDING

**“A COMPARATIVE STUDY OF 2-0 VICRYL VS 2-0
PROLENE FOR RECTUS CLOSURE”**

THANKING YOU,

YOURS SINCERELY,

DR.D.NAGARAJAN

Professor,

Department of General Surgery,

Govt Stanley Medical College and

Hospital,Chennai – 1.

FROM

Dr.KUBERAN K.,B.Sc.,M.S.,

HEAD OF THE DEPARTMENT,

DEPARTMENT OF GENERAL SURGERY,

GOVERNMENT STANLEY MEDICAL COLLEGE AND HOSPITAL,

CHENNAI - 1

TO

THE ETHICAL COMMITTEE,

GOVT. STANLEY MEDICAL COLLEGE& HOSPITAL,

CHENNAI –600001.

(THROUGH PROPER CHANNEL)

RESPECTED SIR,

SUB: RECOMMENDING THESIS TOPIC FOR ETHICAL COMMITTEE APPROVAL

THE THESIS TOPIC

**“A COMPARATIVE STUDY OF 2-0 VICRYL VS 2-0
PROLENE FOR RECTUS CLOSURE”**

**IS BEING DONE ACCORDING TO THE REGULATIONS OF THE ETHICAL COMMITTEE AND I
RECOMMEND IT FOR ACCEPTANCE**

THANKING YOU,

YOURS SINCERELY,

Prof.Dr.KUBERAN K.,B.Sc.,M.S.,

**Head of the Department,
Department of General Surgery,
Govt Stanley Medical College and Hospital,
Chennai – 1.**

FROM

DR. MADHURI SUDHAKAR

POST GRADUATE,

DEPARTMENT OF GENERAL SURGERY,

GOVT STANLEY MEDICAL COLLEGE& HOSPITAL,

CHENNAI - 600001.

TO

THE DEAN,

GOVT. STANLEY MEDICAL COLLEGE& HOSPITAL,

CHENNAI -600001.

(THROUGH PROPER CHANNEL)

RESPECTED SIR,

SUB: SUBMITTING THESIS TOPIC FOR ETHICAL COMMITTEE APPROVAL

I AM HEREBY SUBMITTING MY THESIS TOPIC

**“A COMPARATIVE STUDY OF 2-0 VICRYL VS 2-0
PROLENE FOR RECTUS CLOSURE”**

FOR ETHICAL COMMITTEE APPROVAL.

THANKING YOU,

YOURS SINCERELY,

[DR.MADHURI SUDHAKAR]

FROM

Chennai

Dr. MadhuriSudhakar,
Post Graduate,
Department of General Surgery
Govt. Stanley Medical College and Hospital,
Chennai – 600001.

TO

The Chairman,
Institutional Ethical Committee,
Govt. Stanley Medical College and Hospital,
Chennai –600001.

(THROUGH PROPER CHANNEL)

RESPECTED SIR/ MADAM,

SUB: Submitting thesis committee for ethical committee approval

I am hereby submitting my thesis topic

**“A COMPARATIVE STUDY OF 2-0 VICRYL VS 2-0
PROLENE FOR RECTUS CLOSURE”**

for ethical committee approval.

I submit the following undertaking:

1. I will get informed consent from the patients and maintain confidentiality

2. I will carry out the work without being detrimental to regular activities as well as without extra expenditure to the institution or the government
3. I will inform the committee in the occurrence of any change in the study procedure, site, investigation or guide
4. I will not deviate from the area of work for which I have applied for ethical clearance
5. I will inform the institutional ethical committee immediately in the occurrence of any adverse events or serious adverse reactions
6. I will abide by the rules and regulations of the institution
7. I will complete the work within the specified period I have applied or and if any extension of time is required, I shall apply for permission again and continue the work
8. I will submit the summary of the study to the ethical committee on completion of work
9. I will not claim funds from the institution while doing the work or on completion
10. I understand that the members of the institutional ethical committee have the right to monitor the study without prior intimation

Thanking you

YOURS SINCERELY,

[DR.MADHURI SUDHAKAR]

“A COMPARATIVE STUDY OF 2-0 VICRYL VS 2-0 PROLENE FOR RECTUS CLOSURE”

Dr.MADHURI SUDHAKAR, M.S.,
PG IN GENERAL SURGERY

INTRODUCTION:

The finest duty of a surgeon is letting a wound heal by primary intention. Among all wound closures, abdominal wound closure is the most challenging task for a surgeon. There are different techniques according to suture material, suturing technique and length of suture material that have been suggested optimal for rectus closure. These prospects are still under study and are controversial. Early dehiscence usually occurs from the fifth to eighth post operative day presenting as serosanguinous discharge from wound site and feeling of ‘give way’. Collagen formation in a wound occurs by two weeks until which the tensile strength of the suture material is required to provide mechanical strength to the wound. The tensile

strength of vicryl is two to three weeks and that of prolene is many years. Theoretically vicryl has no disadvantage over prolene in rectus closure.

AIMS AND OBJECTIVES:

PRIMARY OBJECTIVE:

- To compare the use of 2-0 vicryl and 2-0 prolene for rectus closure in both emergency and elective cases and following up their rates of early dehiscence

MATERIALS AND METHODS:

PLACE OF STUDY

DEPARTMENT OF GENERAL SURGERY, GOVT STANLEY
MEDICAL COLLEGE AND HOSPITAL, CHENNAI

DURATION

6 MONTHS

STUDY DESIGN

PROSPECTIVE STUDY

SAMPLE SIZE

40 PATIENTS

INCLUSION CRITERIA

ALL PATIENTS UNDERGOING LAPAROTOMY FOR ALL
PATHOLOGIES ELECTIVE SETTINGS

EXCLUSION CRITERIA

- OLD AGE >80 YEARS
- COPD
- MORBID OBESITY
- CHRONIC STEROID INTAKE

METHODOLOGY:

BRIEF PROCEDURE:

- Ethical clearance will be obtained from the institute ethical committee
- Written informed consent will be obtained from all patients before subjecting them for the study
- All patients undergoing midline laparotomy in both elective and emergency setting (other than exclusion criteria) are registered and followed up in the early post operative period upto two weeks watching out for wound dehiscence.
- Patients are divided into two groups A and B. A – 2-0 Prolene used for closure, B- 2-0 vicryl used for closure
- All wounds are closed in a standardized manner to prevent bias, ratio of suture material length to wound length being 4:1, continuous suturing, inter suture distance 1 cm , and distance from wound edge being 2 cm.
- Patients are followed upto two weeks of surgery
- The observations were recorded and tabulated.

REFERENCES

- DeLancey, J, Hartman, R, *Glob. libr. women's med.*, (ISSN: 1756-2228) 2008; DOI 10.3843/GLOWM.10038
- Singh G, Ahluwalia R. A comparison between mass closure and layered closure of midline abdominal incisions. *Med J DY PatilUniv* 2012;5:23-6
- Bartlett LC: Pressure necrosis is the primary cause of wound dehiscence. *Can*

PROFORMA:

NAME :

AGE :

IP NO :

1	Presenting complaints	
2	Pre operative Diagnosis	
3	Intra operative Diagnosis	
4	Intra operative findings	
5	Surgery done	
6	Suture material used for rectus closure	

7	Symptoms and signs of early wound dehiscence <ul style="list-style-type: none"> • Serosanguinous discharge • ‘Feeling of give way’ • Evisceration 	
8	Intra operative period <ul style="list-style-type: none"> • Duration of surgery • Intra op hypotension • Intra op blood loss 	
9	Post operative period <ul style="list-style-type: none"> • Glycemic status • Wound infection • Respiratory tract infection • Duration of stay in hospital 	
10	Cost effectiveness	

GOVT.STANLEY MEDICAL COLLEGE, CHENNAI- 600 001
INFORMED CONSENT

DISSERTATION TOPIC
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PLACE OF STUDY: GOVT. STANLEY MEDICAL COLLEGE, CHENNAI

NAME AND ADDRESS OF PATIENT:

I, _____ have been informed about the details of the study in my own language.

I have completely understood the details of the study.

I am aware of the possible risks and benefits, while taking part in the study.

I understand that I can withdraw from the study at any point of time and even then, I will continue to receive the medical treatment as usual.

I understand that I will not get any payment for taking part in this study.

I will not object if the results of this study are getting published in any medical journal, provided my personal identity is not revealed.

I know what I am supposed to do by taking part in this study and I assure that I would extend my full co-operation for this study.

Name and Address of the Volunteer:

Signature/Thumb impression of the Volunteer

Date:

Witnesses:

(Signature, Name & Address)

Date:

Name and signature of investigator: