# ABSTRACT FOR THE CONFERENCE

1. Title of the project:

PROPHYLACTIC IV CANNULA INSTALLATION OF LOW DOSE HEPARIN IN THE PREVENTION OF SUPERFICIAL THROMBOPHLEBITIS IN SURGICAL PATIENTS

1. Name of the investigators / Guide with designation & department:
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1. Number of projects already with the Student/Internee in hand: Nil
2. Sources of funding if any: Nil
3. Introduction & Review of Literature:

Peripheral intravenous cannulation is a common procedure in medical practice. Improper IV cannulation can cause intimal damage leading to complications ranging from superficial thrombophlebitis, cellulitis, etc. [1] Thus, prophylaxis will be a better alternative compared to treatment for complications of IV cannula insertion which can be achieved by the installation of low dose heparin. Heparin is an anticoagulant that prevents clot formation by AT-dependent inhibition of factors II and X (mainly). [2]

The addition of heparin decreases the rate of catheter occlusion and prolongs the duration of catheter patency. [3] Significant reduction in rates of thrombophlebitis and infusion failure is observed. [4]

1. Objectives of the study:
   1. To compare the incidence of superficial thrombophlebitis at cannulation site post IV cannulation in surgical patients between 2 groups.
   2. To compare the requirement in change of IV cannulation site due to clot formation and various other causes between 2 groups.
   3. To compare the pain scoring at IV cannulation site in 2 groups.
2. Justification for the conduct of the study

Improper IV cannula insertion can lead to complications like superficial thrombophlebitis, cellulitis, etc. This prolongs hospital stay, causes patient discomfort, and increases treatment costs. Thus, prophylaxis will be a better alternative compared to treatment for complications of IV cannula insertion which can be achieved by installation of low dose heparin.

1. Methodology:
   1. A total of 60 patients who are undergoing surgery and require IV cannulation for more than 3 days are taken for the study after informed consent. These patients are randomly divided into 2 groups of 30 patients each. In Group A, patients receive 1ml of unfractionated heparin through peripheral IV cannula every 12thhourly starting from day 1 of IV cannulation. In Group B, patients will not receive heparin and are considered as control group. The study is conducted in the Department of General Surgery, SS Institute of Medical Sciences and Research Centre for a period of 2 months duration.
   2. Inclusion criteria

* Patients undergoing surgeries requiring minimum of 3 days of IV drug administration
* Patients aged between 20 to 60 years
* Patients undergoing elective surgeries
  1. Exclusion criteria
* Pediatric and elderly patients
* Patients not giving consent
* Patients undergoing cancer therapy
* Patients receiving chemotherapy
* Patients undergoing emergency surgeries
* Patients undergoing surgeries which requires less than 3 days of IV drug administration
  1. Study design

Following are collected from both the groups

* Number of patients developing superficial thrombophlebitis at cannulation site, classified into different grades of thrombophlebitis.
* Number of patients requiring change of IV cannulation site due to clot formation and various other causes.
* Pain score at IV cannula site on day 3, 4 and 5.
  1. References

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    1. Method of statistical analysis

Unpaired T test to detect the significance of heparin usage in preventing IV cannula site thrombophlebitis

* 1. Questionnaire proforma

Pain score (Visual Analogue Scale)

No Pain

I

0

Choose a Number from Oto 10 That Best Describes Your Pain

Distressing Unbearable

Pain Pain

1

I

2

I

3

4

I

5

I

6

I

7

I

8

I

9

I

10

ASK PATIENTS ABOUT THEIR PAIN

INTENSITY-LOCATION-ONSET-DURATION-VARIATION-QUALITY

@.

0

NO HURT

® ®•

1

HURTS LITTLE BIT

*2*

HURTS LITTLE MORE

@ ® ®

'

3

HURTS EVEN MORE

4

HURTS

WHOLE LOT

5

HURTS WORST

Figurea: Tools Commonly Used to Rate Pain

Visual Analogue Scale

**# F aces# Pain Rating Scale**

1. Whether Consent forms part in English and in local language is enclosed? Yes
2. Conflict of investigator (s) interest: No

Personal information:

* + Name: Dr. Anantharaju G S
  + Age: 32yrs
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  + Sex: Male
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Educational qualification:

* + M.B.B.S: “Sri Siddhartha medical college”, Tumkur.2003-2009
  + M.S General Surgery: “Sri Devraj urs academy of higher education and research”, Kolar. 2010-2013
  + FMAS: Kochi 2017 Additional training programs:
  + Medical education training: Belgaum 2017
  + “Master course in laparoscopic hernia” : CEMAST Mumbai, 2017 • “Comprehensive laparoscopic training in cholecystectomy and appendicectomy”: CEMAST Mumbai, 2016

Work experience:

* + Senior resident/Post graduation: 2010-2013: Sri Devraj Urs academy of higher education and research, Kolar, Karnataka.
  + Assistant professor: Sri Dharmasthala Manjunatheshwara Medical College, Dharwad, Karnataka. September 2013 till date

Publications (Recent):

1. Original research article “A clinical comparative retrospective cohort study in the surgical management of enteric perforation, by comparing primary closure and closure with free omental sheet graft”.Int Surg J 2018;5:45-8
2. Original research article “Comparative study of primary skin closure with adhesive skin glue and conventional suture material in clean elective surgery”. Int J Intg Med Sci 2016;3(8):384-90

## Declaration by HOD

I have no objection in permitting staff / student to conduct research work in the department. I take complete responsibility in supervise, produce and present the final research work to the Institutional Ethical & Review board

Signature, Seal & date

# UNDERTAKING BY ALL THE INVESTIGATORS

1. Title of the protocol : PROPHYLACTIC IV CANNULA INSTALLATION OF LOW DOSE HEPARIN IN THE PREVENTION OF SUPERFICIAL THROMBOPHLEBITIS IN SURGICAL PATIENTS
2. We the undersigned authors of the above said protocol declare that we do not reveal the identity of the study participants, his/her personal details as well as the treating doctor if any under any circumstances.
3. We further declare that we do not have any conflict the order of authorship that is submitted for ethical approval. If the necessity arises for change in the order of authorship, we will obtain a written consent from IEC.

Investigators name Signature with date

1.

2.

# INFORMED CONSENT FORM

## Study title: PROPHYLACTIC IV CANNULA INSTALLATION OF LOW DOSE HEPARIN IN THE PREVENTION OF SUPERFICIAL THROMBOPHLEBITIS IN SURGICAL PATIENTS

Subject’s name…………………………… Age……… Sex………

I confirm that I have read and understood/have been explained the information given by the researcher/moderator and I had an opportunity to ask questions.

I understand that the participation in the study is voluntary and I am free to withdraw at any time without giving any reason and without being my medical care and legal rights being affected.

I understand that my identity will not be revealed to any third party or in publication. I understand that the researchers/ regulatory authorities/ ethics committee will not need my permission to access my health records if necessary for the current study.

I agree not to restrict the use of any data or results that arise from this study provided such a use is only for scientific purpose(s).

I agree to take part in the above study.

Signature of the subject…………………………………. Date………………………..

## Name of the Investigator (printed)…Dr Anantharaju G. S

………………………………………………………..

**Signature of the investigator…**………………………………Date……………………….

Name and signature of the impartial witness with date if required

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