**STUDYPROTOCOL**

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**I**ntrahospital **T**ransport **o**f **U**nstable **C**ritical Care **H**ospitalized patient

**A Practice Pattern Observational Multicenter Study ( I TOUCH study)**

**An ISCCM Research Project**


**Principal Investigators:**

Steering committee members

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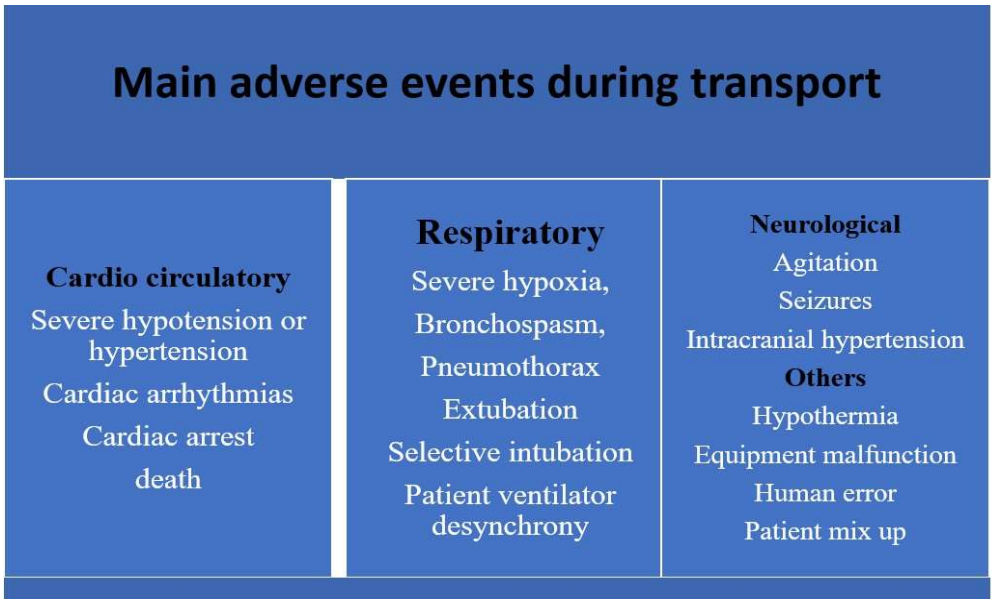
## INTRODUCTION

Intrahospital transport of critically ill patients is often required for diagnostic and therapeutic indications. Intrahospital journey of these patients presents with the same challenges and risks as posed by inter hospital transfer.[1] It often adds to the increased workload and stress to the critical care staff[2] Major adverse events reported during transport of critically ill patients [3] depicted in **fig 1**




Despite presence of several guidelines and few recommendations [3], there has been no consensus regarding the ideal practice guidelines for intra hospital transport in critically ill patients. We would like to collect data prospectively from various ICUs across the country regarding the practice of intra hospital transport in unstable adult critical care patients and various complications associated in a 90-daystudyperiod.Wewould like to assess intra hospital transport practices and complications associated in an attempt to define the ideal ISCCM consensus statement regarding intra hospital transport of critically ill hospitalized patients.

Primary outcomes:

1. Incidence of major complications during and after transport of critically ill adults such as

    a. hemodynamic instability (SBP < 90 mmHg, or MAP < 65 mmHg, or need for addition of, or increase in doses of vasopressor agents)

    b. Worsening of respiratory status (de-saturation to < 92%, need for intubation and ventilation, if not already ventilated, need for increase in FiO2, hyper-carbia, PaCO2 > 45 mmHg, unless already hyper-carbic)

    c. Accidental extubation, accidental removal of Inter costal drains, abdominal drains

d. Increase in hemorrhage

e. Worsening of GCS as compared to pre-transport condition

Secondary outcomes:

1. Common indications for transport
2. Any other complications not included in the primary outcomes
3. Malfunction of any of the transport equipment
4. Whether a change in management occurred as a result of the transport, particularly for imaging, such as insertion of new drainage catheters or pigtail catheters, surgery or change of antimicrobial agents
5. ICU outcome at 30 days or discharge whichever is earlier : dead or alive
6. Hospital outcome at 30 days or discharge whichever is earlier : dead or alive

**Study design** Prospective Observational Multi-Centre National Cohort Study

**Patient Enrollment:**

All consecutive adults critically ill patients requiring transport out of the ICU for imaging, interventional procedures or surgical procedures will be included in the study.A written informed consent will be obtained from the LAR followed by deferred consent from the patient will be obtained for inclusion of the patient data in the study.

**Data Collection**

Baseline demographics, ICU admission diagnosis, APACHE II and SOFA on admission and at the time of transport, hemodynamic and ventilatory parameters before, during and after the patient comes back to the ICU will be collected. Any change in any of the parameters during parameters will be recorded.

**Statistical analysis plan:**

Please involve a statistician for this

We need the incidence of complications, common indications for transport, and predictors of complications and predictors of outcomes to be calculated.

I will plan for simple descriptive analysis and then univariate and multivariate analysis.

The study would invite all ICUs across the country to participate in the study. The invites will be sent at frequent intervals till 15th July by the Research Committee. Hospitals with more than one ICU can enroll each ICU separately. Each ICU can contribute as much data as possible during the study period. Each ICU will designate one PI and one co-PI for the study who will be responsible for ethical committee clearance, data collection and study co-ordination in their ICU. Each ICU will collect data from 1st August to 30thNovember.The study would end on 30thNovember.

Each Centre can start recording the data in paper CRF till they get an Ethics approval and later on can fill the data online.

**Study Timelines**

IEC. Approval from IEC of coordinating center: date ASAP

CTRI registration

Email invitation to all ICUs :30th May 2022

IEC clearance from participating institutes: 15th of June 2022

Start of data collection: 1 august 2022 to 15th August 2022

Last date of data collection: 30 November 2022

Data cleaning and analysis: December 2022

Presentation to ISCCM research committee: Feb 2023

Presentation in CRITICARE2023:

Publication**:**2023

**Inclusion criteria:**

- All adult patients (> 18years old) admitted to ICU who are unstable
- Unstable included requiring oxygen therapy, mechanical ventilation or vasoactive medications .patients with poly trauma ( not on ventilator/ vasopressors) with chest drains, EVDs , patients with C spine injury with collar
- post operative patients with abdominal drains
- low GCS/ combative patients
- patients with arrhythmias on infusions.

**Exclusion criteria:**

- All adult patients < 18years old admitted to ICU

- Critically ill patients who are not on vaso pressors or oxygen therapy with no drains and thermodynamically stable with NSR (Normal sinus rhythm)
- Those who are not willing to give consent

**Data Collection**

The procedure wills be performed as per the prevailing practice of the ICU. The data will be collected prospectively and filled in the Case Record Form (CRF) after the completion of the procedure.

**References:**


1. Shirley PJ, Bion JF. Intra-hospital transport of critically ill patients: minimising risk. Intensive care medicine. 2004 Aug;30(8):1508-10.
2. Song Y, Zhao Q, Yang M, Xie X, Gong M, Chen H. Intrahospital transport of critically ill patients: A cross-sectional survey of Nurses' attitudes and experiences in adult intensive care units. Journal of Advanced Nursing. 2022 Feb 23.
3. Fanara B, Manzon C, Barbot O, Desmettre T, Capellier G. Recommendations for the intra-hospital transport of critically ill patients. Critical Care. 2010 Jun;14(3):1-0.
4. Jarden RJ, Quirke S. Improving safety and documentation in intrahospital transport: development of an intrahospital transport tool for critically ill patients. Intensive and Critical Care Nursing. 2010 Apr 1;26(2):101-7.