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## ***Study protocol***

Assessment of intercostal block scheduling in preventing acute surgical and post-surgical pain in thoracoscopic surgery

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Site of the study : Department Surgery chest House Patients Carmel

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## Protocol Summary:

**Background:** Patients undergoing Thoracic surgery may suffer from post-operative severe pain. Today there is widespread use of the minimally invasive approach called VATS = video assisted thoracoscopic surgery. This approach reduces postoperative pain, but pain balance is still a Controversial issue. In most surgeries performed in our unit, an intercostal block, with Bupivacaine, is given during surgery to relieve postoperative pain. This study examines whether the timing of block performance at the beginning or end of the surgery affects the quality of the patient's pain control balance.

**Methods:** This study is a prospective comparative clinical trial between two groups of patients. Each group will include 30 randomly assigned patients with similar demographic characteristics. Patients were recruited from the surgical community in the Department of Chest Surgery at Carmel Medical Center according to the inclusion criteria.

In the study group, an intercostal block will be performed at the beginning of the operation and in the control group the intercostal block will be performed at the end of the operation.

The follow-up of Patients will include: assessment of pain levels in the days after surgery using visual analogue scale (VAS), calculation of the amount of pain medication intake during hospitalization, duration of hospitalization, and surgical and postoperative complications.

Study participants will be above 18 years old and able to sign an informed consent.

### ***Inclusion Criteria***

Above 18 years old

Thoracoscopic Surgery

No Known allergy to bupivacaine

Able to sign an informed consent

### ***Non inclusion Criteria***

Previous surgery in the same side of the thorax

## Inter costal BUPIVACAINE block

Is an analgesic procedure the involve the injection of BUPIVACAINE between the ribs close the intercostal nerve. This procedure blocks the pain transmission of the nerves

BUPIVACAINE Is an anesthesia medicine from the Amino-amides Family. It is being used for many years the action of the drug Based On tying of The material To the sodium canals voltage dependent within the cells and blocking the passage of the sodium to the nerves cells. This block prevents depolarization of The cells. No cell Depolarization meaning No pain.

The purpose of the experiment:

The study try to appreciate the quality of pain control during and after thoracoscopic surgery and to see whether change in the timing of the intercostal block improve pain control

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