INTRODUCTION

It's will known fact that many patients experiences moderate to severe pain after surgery due to inadequate pain treatment, and every effort should be made to overcome. This phenomenon, one of the most severe types of postoperative pain has been reported after thoracic surgery ***(Conacher, 2001).***

Pain following thoracic surgery has been reported to be among the most intense clinical experiences known. The nociceptive pathways that are responsible for postthoracotomy pain are still poorly understood, possible sources of nociceptive input that may contribute to post-operative pain following thoracic surgery are multiple and include: the site of surgical incision, disruption of the intercostals nerves, inflammation of the chest wall structures adjacent to the incision, pulmonary parenchyma or pleura, and thoracotomy drainage tubes. Unrelieved acute pain following thoracic surgery can not only contribute to postoperative pulmonary dysfunction, but may also contribute to the development of postthoracotomy pain syndrome ***(Scott, 2007).***

Some patients develop chronic postthoracotomy pain, that may last for months or years, in addition, severe postoperative pain contributes to postoperative pulmonary dysfunction, so the choice of perioperative analgesic technique may play an important role here ***(Udre et al., 2003).***

Systemic opioids have been used traditionally for the treatment of postthoracotomy pain, but in the recent years new methods and techniques i.e., non steroidal anti-inflammatory drugs, epidural or intrathecal opioids and different regional analgesic techniques have been tried and become more popular. However, some of these new delivery systems and techniques are potentially hazardous ***(Concha et al., 2004).***

The epidural analgesia has been known since the beginning of the last century therefore, its basic effects are considered to be clear. Thoracic epidural analgesia has been considered to have a good anesthetic efficacy and to decrease postoperative pain and complication rate ***(Armon et al., 2007).***

Sources of pain after surgery:

- Inflammatory pain.
- Nociceptive pain.
- Neuropathic pain.

Types of thoracotomy pain:

Thoracotomy produces nociceptive pain due to tissue damage and rib retraction, rib fracture, or rib excision and neuropathic pain. Postthoracotomy pain is aggravated by respiration, coughing and walking, pain may be exacerbated by the presence of chest tubes and drains ***(Armon et al., 2007).***

Severity and duration:

Thoracotomy pain is generally severe and intense that may last for weeks and patients may develop postthoracotomy pain syndromes lasting months to years ***(Concha et al., 2004).***

Types of thoracotomy incisions *(Armon et al., 2007)*:

- Axillary Thoracotomy (Muscle Sparing).
- Thoracic Incisions.
- Posterolateral Thoracotomy.
- Anterior Thoracotomy.
- Median Sternotomy.
- Bilateral Thoracosternotomy (Clamshell).
- Thoracosternotomy (Hemiclamshell).
- Transclavicular Approach (Modified Dartevelle).
- Thoracoabdominal Incision.
- Anterior cervicothoracic approach; which is known as (Modified Thoracosternotomy).