Horizontal Muscle-Sparing Incision

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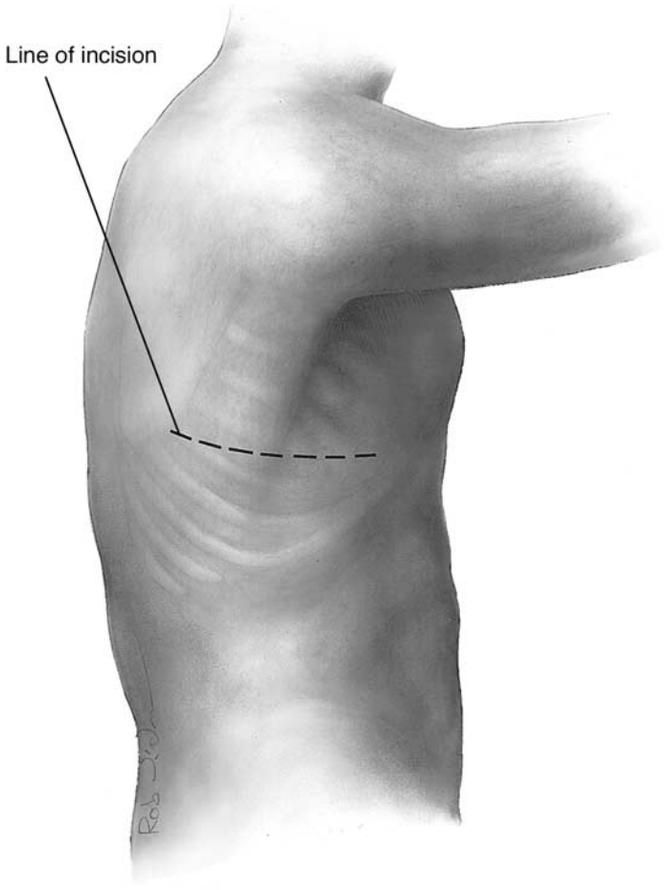
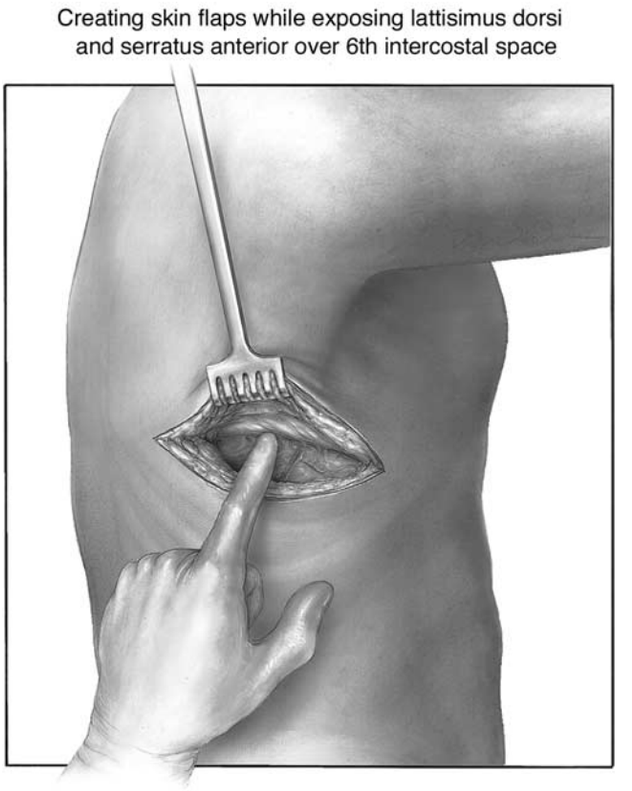
The horizontal muscle-sparing incision has the same benefits as the vertical incision regarding cosmesis and decreased pain. One added benefit of the horizontal incision is that it can be easily converted to posterolateral thoracotomy in procedures that require more exposure.

SURGICAL TECHNIQUE

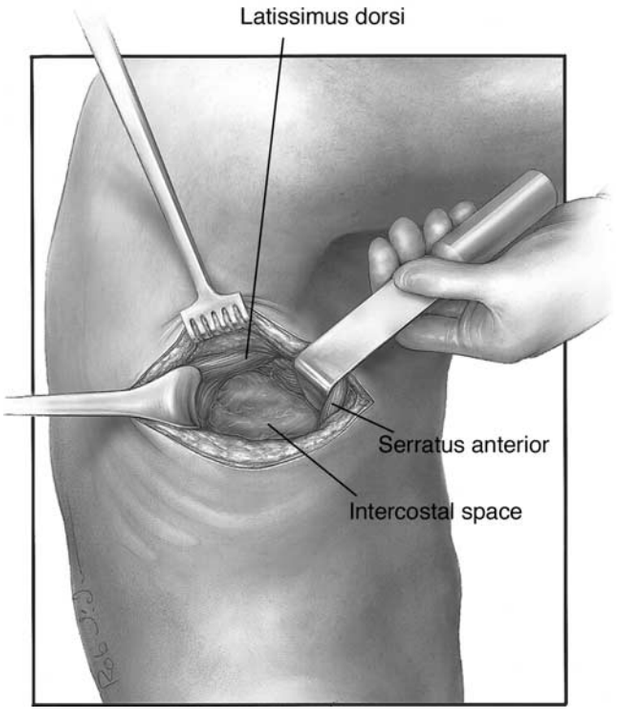


1 A 6 to 8-cm incision is made 2 finger breadths below the tip of the scapula, from the anterior axillary line to the posterior axillary line. Line of incision.



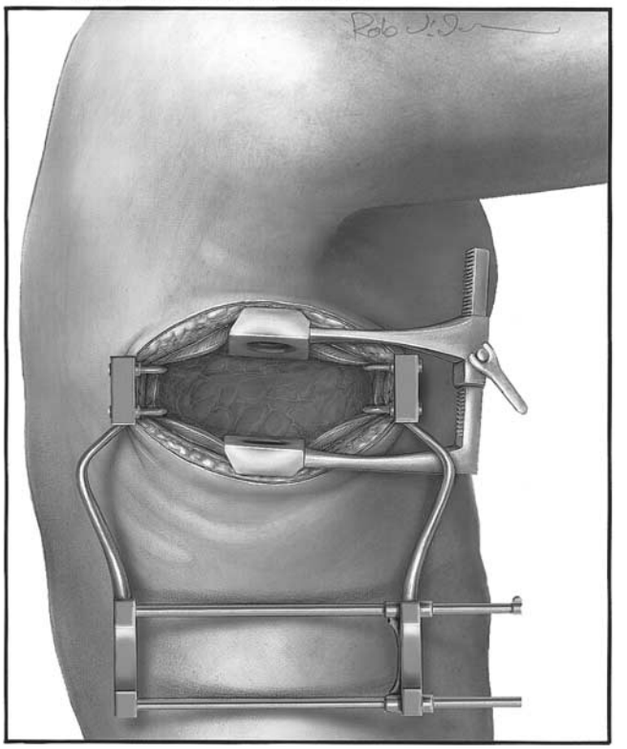
2 Superior and inferior subcutaneous flaps are then raised superficial to the latissimus dorsi muscle. These flaps facilitate mobilization of the latissimus muscle. Creating skin flaps while exposing latissimus dorsi and serratus anterior muscle over intercostal space.

Upon completion of the operation, the ribs are reapproximated using pericostal sutures. If the fifth rib was removed, the intercostal muscles are closed using an absorbable suture. The posterior border of the serratus anterior muscle and the anterior border of the latissimus dorsi muscle are then reapproximated to the areolar tissue from which they were dissected. Two drains are left in the subcutaneous space to prevent seromas from forming below the flaps. Even with this drainage, seromas may form in some patients once the drains have been removed. These seromas will usually resolve after several percutaneous aspirations.



3 The anterior border of the latissimus muscle is then mobilized to facilitate its posterior retraction. The serratus anterior muscle, located just deep to the latissimus, is then mobilized from its posterior border and retracted anteriorly. Latissimus dorsi muscle. Serratus anterior muscle. Intercostal space.

Horizontal muscle-saving thorocotomy held open with retractors at right angles



4 The fifth interspace can then be identified and entered by dividing the intercostal muscles. Alternatively, the fifth rib may be removed. A rib spreader is then placed into the thoracotomy, and the intercostal muscles are divided as far anteriorly and posteriorly as possible above the sixth rib. This procedure maximize the exposure and reduce the chances of a rib fracture. A second rib spreader or a Balfour retractor is then placed at a right angle to the first retractor to hold the latissimus and serratus muscles apart. Horizontal muscle serving thoracotomy held.

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