



What to expect after surgery: Operation for Empyema

Patient and family information, brought to you by the Education Committee of APSA

The following list provides general recommendations and things to monitor after your child's surgery for empyema. When your child is ready to go home, your surgeon will provide you with their specific care instructions. If there are any differences between these guidelines and your surgeon's instructions, please clarify them with your surgeon.

Pain management:

- Pain at the incision(s) after surgery is normal, especially where the chest tube is placed.
- While in the hospital, there are several types of pain medicine available, depending on how bad your child's pain level is:
 - Acetaminophen (Tylenol®) is often used to help provide constant levels of pain control. Depending on your hospital, this medicine can be given through the IV or by mouth.
 - Ketorolac is an NSAID (a medicine like ibuprofen/Advil®), which is given through the IV. This can be also provided on a regular schedule to help provide constant pain control.
 - Ibuprofen (Advil®/Motrin®) can be started once your child's pain is improving, and they have starting eating again. Once ibuprofen is started, the ketorolac will be stopped.
 - Narcotic medications like morphine (through the IV) or oxycodone (by mouth) are available if your child's pain is severe and not improving with the other medications.
 - The dose of these medicines is based on your child's weight, to ensure the correct amount is given.
 - Your child will be watched closely to ensure that these medicines don't slow-down their breathing, which is one of the main side-effects of narcotic medications.
 - Your hospital may have other medicines available to help with managing pain, and these will be discussed with you.
 - Your hospital may also have a Child-Life specialist, who can provide games and other distractions during your child's recovery, which can help with managing pain.
- By the time your child is ready to leave the hospital, Tylenol® and/or ibuprofen should be all that is needed for pain control. You can follow the package instructions for the proper dose.

Breathing Exercises:

- To help with recovering from pneumonia and empyema, your child may be asked to do breathing exercises. Your child's nurse and/or surgeon will demonstrate these exercises and provide a recommended schedule for doing them.

Wound management:

- If your child's chest tube was removed just before your discharge from the hospital, it will be covered by a dressing that seals the opening.

- Your surgeon will let you know when it can be removed, typically 2-3 days after the dressing was placed.
- It should be removed by 5 days after placement, to allow the site to be checked.
- An adhesive bandage or dressing can be replaced, if desired.
- You might also see small white tapes (Steri-Strips™) or a clear-purple surgical glue placed directly on the other incisions. You should leave these in place, and they will start to peel up within 1-2 weeks.
- Do not put any additional ointments or creams on the incisions or glue without discussing it with your surgeon.

Activity:

- Immediately after surgery, your child's nurse will help with moving in/out of bed and other activities.
- By the time your child is ready for discharge from the hospital, activity can be advanced as tolerated.
- Encourage your child to rest when feeling tired or sore.
- If their pain does not improve, or it returns with activity, your child should allow another 1 to 2 weeks before trying this activity again.
- Unless you are told otherwise, participation on sports teams or in gym class should wait until your child has their post-operative visit (usually about 2 weeks after surgery).

School:

- In recovering from an empyema, and the associated pneumonia, it may take a week or two at home before your child feels ready for school. Your surgeon will help guide you on when your child can return to school and other activities.

Bathing:

- It is better to wait for 2 days after the chest tube dressing was placed before taking a shower. This will keep the area protected while the skin is healing over the chest tube site.
- After 2-3 days, it is usually safe to remove the dressing and to take a shower, washing gently around the scars.
- It is OK for the Steri-Strips™ or surgical glue to get wet at this time.

Diet:

- There are typically no restrictions in diet after empyema surgery.

Other specialists:

- Depending on how serious your child's pneumonia was, he/she may also have visits with a lung specialist (pulmonologist). Ask your child's surgeon or other care team members if a lung specialist needs to see your child after discharge from the hospital.

When to call your surgeon's office

- If your child has a fever over 100.5°F (38°C), especially if it is more than 2 days from surgery.
- Any difficulty breathing.
- Pain or swelling at any incision that is getting worse.
- Spreading redness, warmth or drainage at any of the incision sites.
- Opening of the incisions.