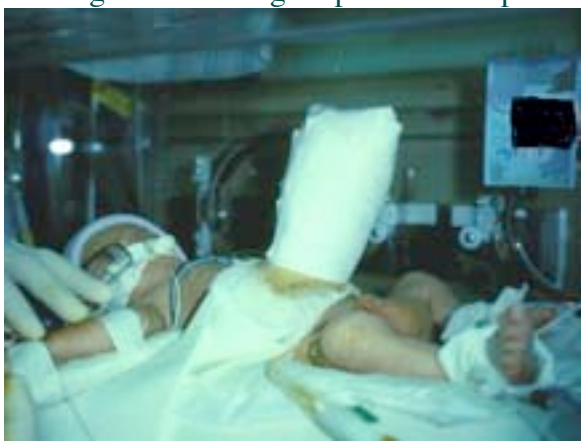
PEDIATRIC SURGERY

Preference Card

Gastroschisis

It is preferable to close the gastroschisis defect primarily, if possible, within 4-6 hours of birth. Beyond this point there is often a significant amount of edema that can make primary closure without a silo difficult. In babies that are significantly premature, have respiratory compromise or have a great deal of edema it is preferable to place a silo in the NICU and reduce the bowel over several days. Nothing is gained by doing a primary closure then having the baby on the oscillator with an erythematous abdominal wall.

1. When placing a silo, arrange for the baby to be sedated and paralyzed.
2. Prep the abdominal wall, but avoid getting betadine on the bowel. Drape the area. The spring-loaded silos are in the NICU or else in the OR. Usually a 5 cm silo is the appropriate size.
3. Drip some saline in the silo to lubricate it and slide it over the bowel.
4. Separate the mesentery/bowel from the abdominal wall to create a space for the lip of the silo and slide the silo under the abdominal wall. Fold it and slip it under the posterior part of the defect, assisted by a retractor, then slide the rest of the silo rim under the abdominal wall--like a tire iron.
5. Once in place and centered, put some neosporin and xeroform around the rim and dress the whole thing with kerlex wrap, around the baby.
6. Hang the silo straight up from the top of the warmer with umbilical tapes.

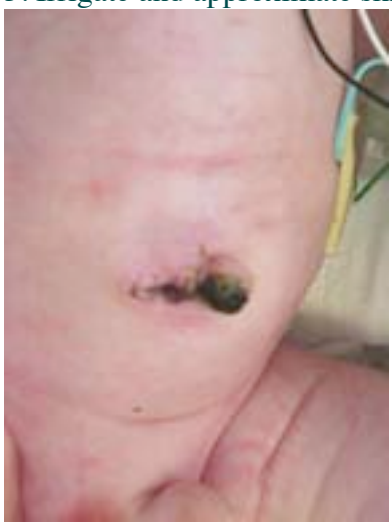


Silo in place

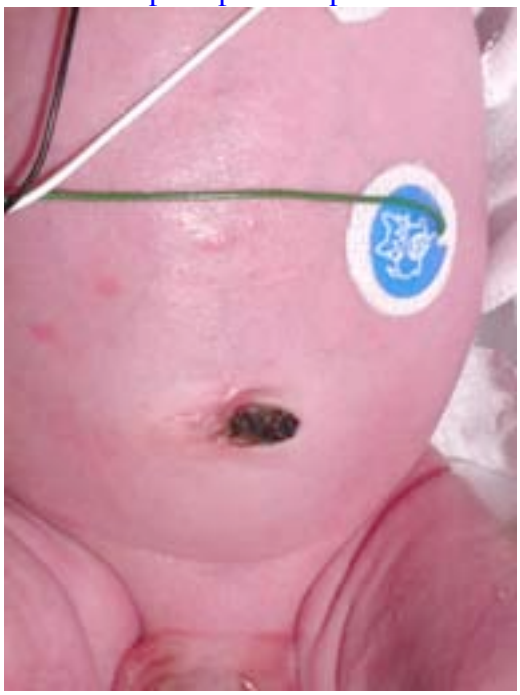
The procedure for fascial closure is the same whether done primarily or after a period of silo reduction. Tie off any redundant umbilical cord before prepping. If doing a primary closure, leave enough length for umbi lines to be placed postoperatively, if necessary.

1. If a silo was not used, put a finger under the abdominal wall rim and stretch the wall all around.
2. Reduce the bowel sequentially. Always check that ventilation isn't compromised as this proceeds.

3. Dissect the abdominal wall skin off of the muscle circumferentially, except at the umbilicus. Leave the umbilicus intact. Develop a good flap of muscle.
4. Approximate the muscle with a 3-0 PDS purse-string suture. Bury the knot.
5. Irrigate and approximate skin with interrupted 5-0 vicryls and cover with dermabond.



Immediate postoperative picture



Seven days postop