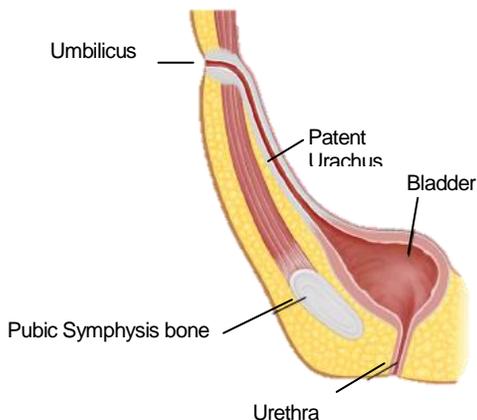


## Urachal Remnant

### What is an Urachal Remnant?

During fetal development, the urachus lies between the umbilical arteries and connects the urinary bladder with the belly button. This connection allows for urine drainage through the umbilical cord. In the fourth or fifth month of fetal development, the urachus closes and becomes a cord-like structure, or ligament, that stretches from the belly button to the bladder. If the urachus does not close completely at this time, three things can occur after the baby is born:

- **Urachal cyst** - This happens in 30% of cases. The urachus closes without any opening to the bladder. A residual cyst, or sac of fluid, forms underneath the belly button where the urachus closed. This cyst usually is noticed as a tender, swollen mass at the belly button. This cyst can often become infected.
- **Urachal sinus** - The urachus partially closes, but the remainder of the tube opens to the belly button and/or the bladder. Fluid can drain from the belly button.
- **Patent urachus** - A communication between the bladder and the belly button remains, called a fistula. Urine can drain from the belly button.



### What are the symptoms of an Urachal Remnant?

- Thin, light yellow, watery discharge from the belly button
- Crusting at belly button, even with no visible drainage
- Pain, redness, and/or swelling at the belly button
- Infection at the belly button



## Indication for Surgery

**If the urachus remains open or partially open, infection can occur in the remaining tissue.** Because of the risk of infection with urachal remnants, the cysts and the entire urachal tract should be surgically removed. There is also a small risk for cancer developing later in life, so surgical removal is usually advised.

## What Diagnostic Tests Need to be Performed?

At the time of diagnosis, your surgeon may recommend an abdominal ultrasound to determine if the remnant is a cyst, sinus, or patent urachus.

## What is the Surgical Procedure for an Urachal Remnant?

The surgery is performed under general anesthesia on an outpatient basis.

- The child will breathe gas through a mask to put them to sleep for the surgery.
- Once asleep, the surgeon will make an incision in the belly button.
- Through this incision, the surgeon will remove the cyst, if present, and the remaining urachal tissue.
  - If an umbilical hernia is present, it will be repaired at this time as well.
- The incision will be closed with dissolvable sutures underneath the skin, so no sutures will need to be removed later. The incision is then covered with surgical glue that seals the skin, promoting healing and preventing infection.
- The child will then be brought into the recovery room where parents can be present.

**Disclaimer:** *Your child's condition is unique. The information contained on this web site is not intended to substitute for advice from a doctor or nurse. If you are unsure about any aspect of your patient's care, please contact us at 303-839-6001, or talk to your pediatrician.*

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