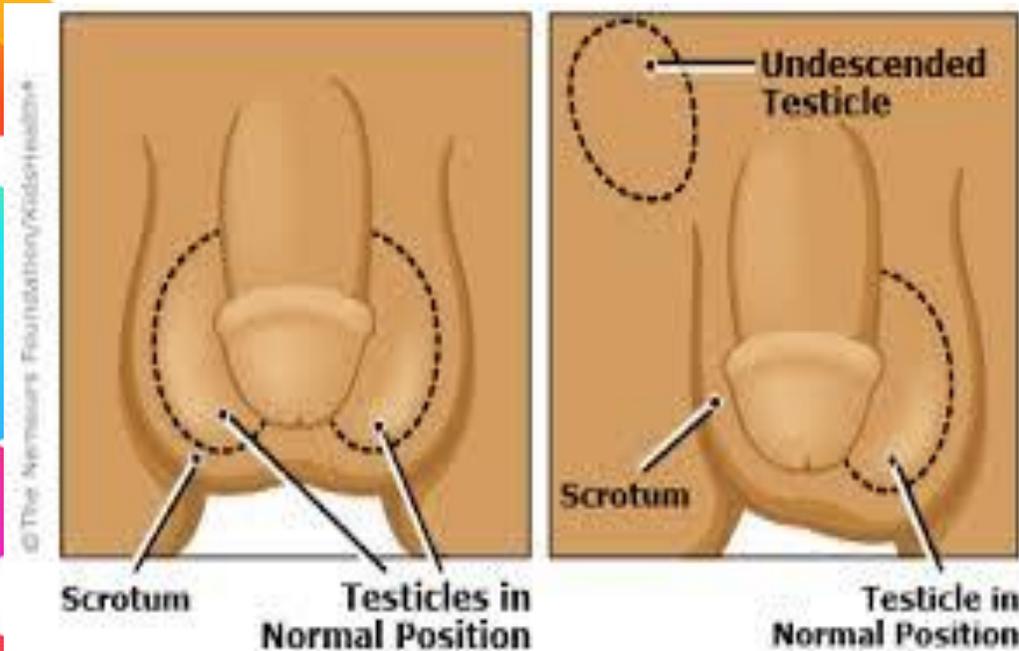


CRYPTORCHIDISM

Mrs. Preethi Ramesh
Senior Nursing Lecturer
BGI

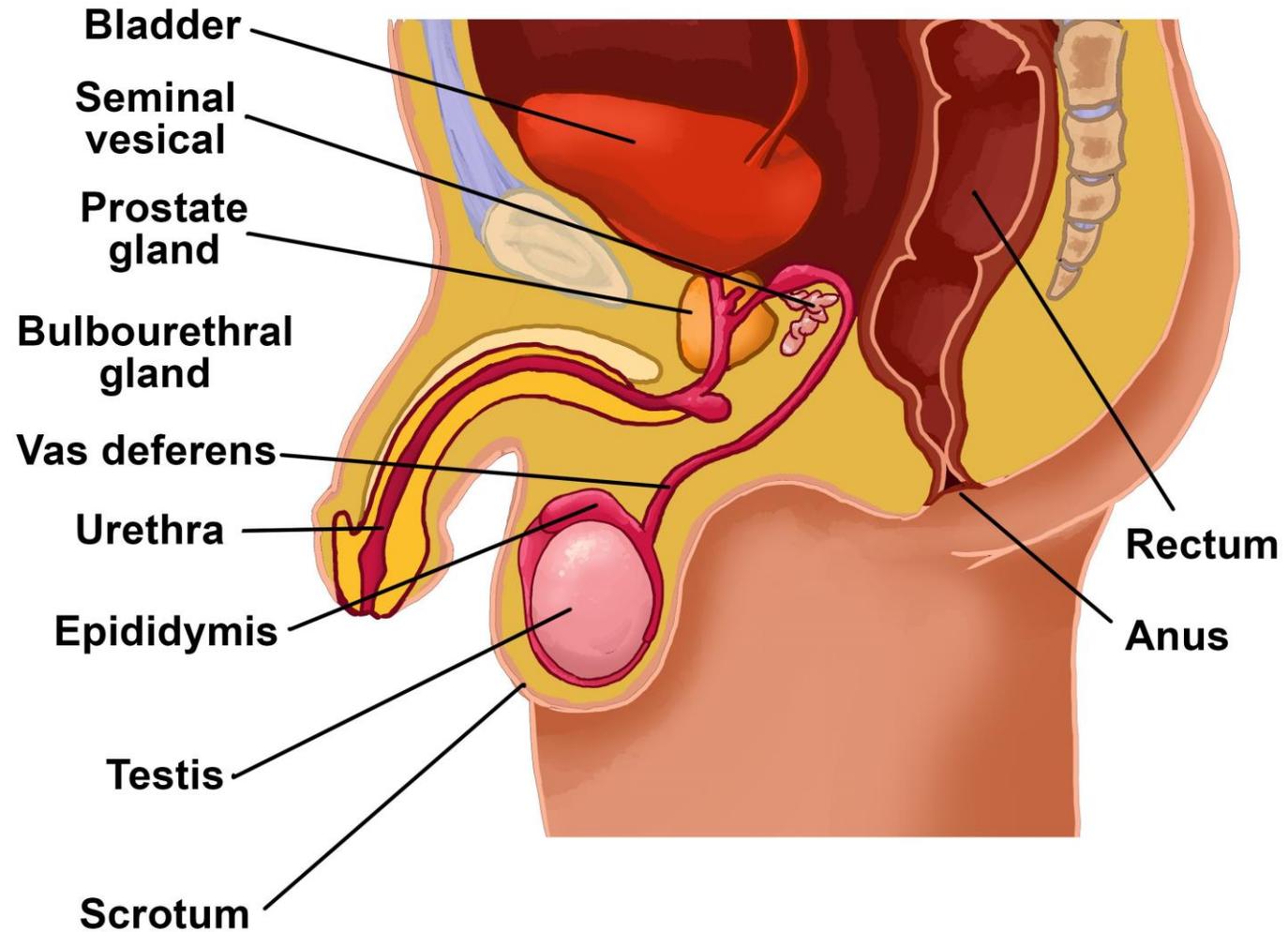


INTRODUCTION



- ❖ It is most common congenital defect, characterized by absence of one or both testes from the scrotum.
- ❖ It is the most common congenital defect of the male genitalia.
- ❖ It may occur bilaterally and unilaterally and may be the cause of infertility if corrective surgery is not done.

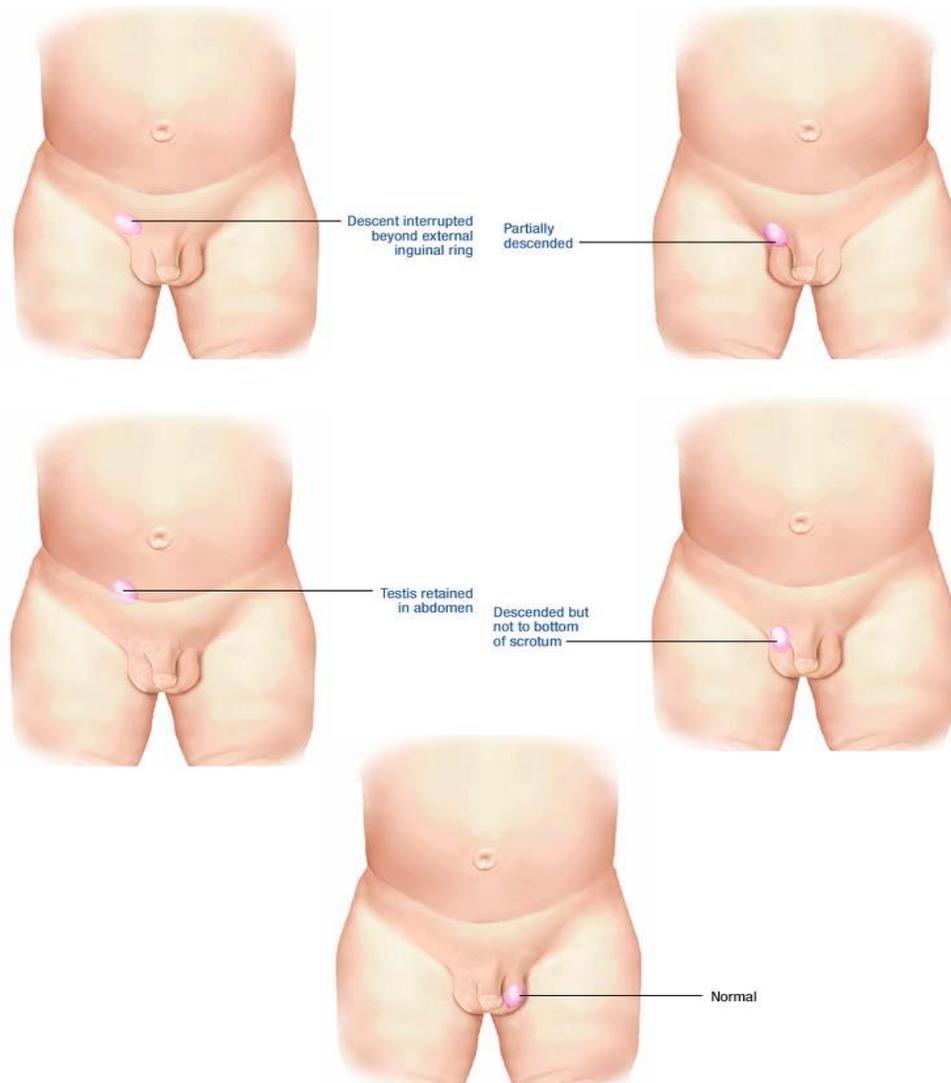
ANATOMY OF MALE REPRODUCTIVE SYSTEM



WHAT HAPPENS UNDER NORMAL CONDITIONS?

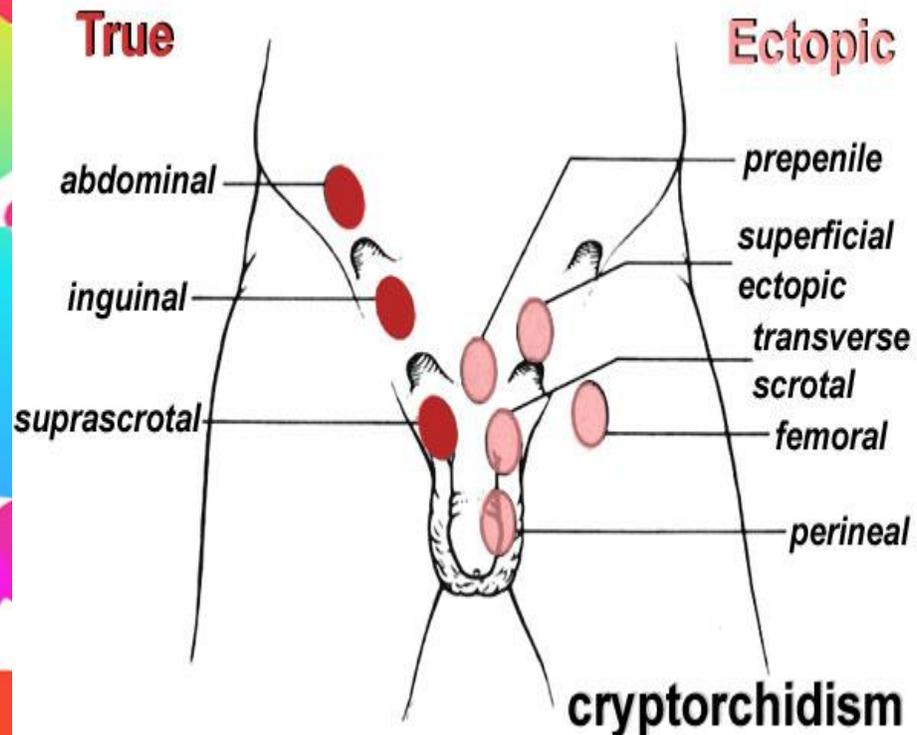
- ❖ Normal testicles arise early in a boy's development. Although they are located initially in the abdominal cavity, they descend or drop into the scrotal area during the latter part of pregnancy.
- ❖ In response to the baby's normal hormones, the testicles in the infant make sperm and the male sex hormone testosterone. The purpose of the scrotum is to allow the testis to be in a cooler environment than the body, because sperm cannot develop at body temperature.
- ❖ During childhood, sperm in the testicles are undergoing a maturation process that ultimately results in mature sperm at puberty. If the testicles are undescended, meaning not in the scrotum, then the sperm do not mature.

DEFINITION



- ❖ A Greek word which means 'hidden testes'
- ❖ Cryptos – Hidden
- ❖ Orchis - Testis
- ❖ It refers a failure of testicular decent into the scrotum.

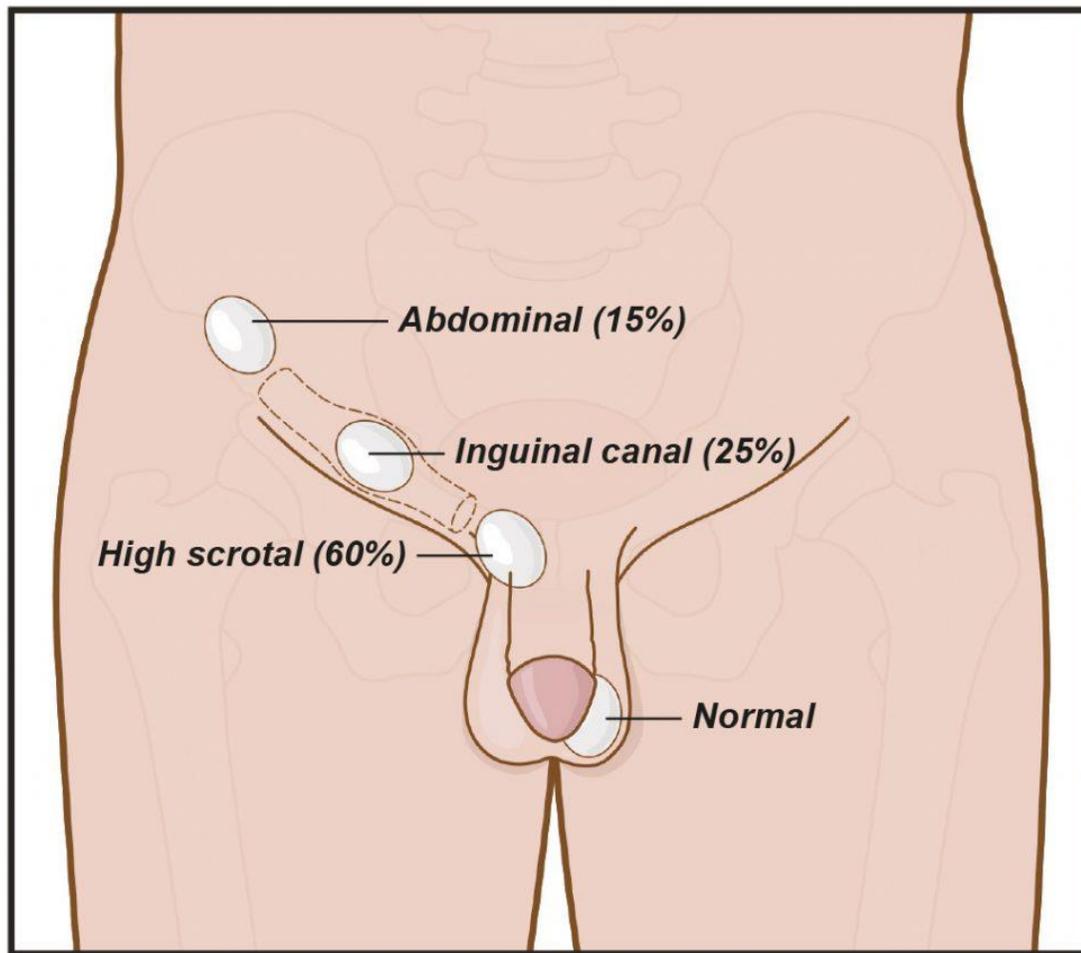
TYPES OF CRYPTORCHIDISM



Definitions

- **Cryptorchidism** – a testis that is not within the scrotum and does not descend spontaneously by 4 mo
 - **Undescended testis (UDT)** – stopped short on normal path
 - **Ectopic testis** – descend normally through the external ring but then are diverted to an aberrant position
 - **Absent testis** – no testis due to agenesis or atrophy (Boys who have bilaterally absent testes have **anorchia**)
 - **Retractile testis** – normal testis that has been pulled into a suprascrotal position by the cremasteric reflex
 - **Ascending testis** – noted to be in a scrotal position in childhood and then to become undescended

HOW DOES UNDESCENDED TESTES LOOK LIKE?



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ETIOLOGY AND RISK FACTORS

- Idiopathic (a combination of genetics, maternal health and other environmental factors may disrupt the hormones and physical changes that influence the development of the testicles)
- Severely premature infants can be born before descent of testes
- Low Birth Weight
- Diabetes mellitus and obesity of the mother
- Maternal exposure to estrogen during the first trimester
- Risk factors also include exposure to regular alcohol intake during pregnancy
- Cigarette smoking during pregnancy also known risk factor
- Family history

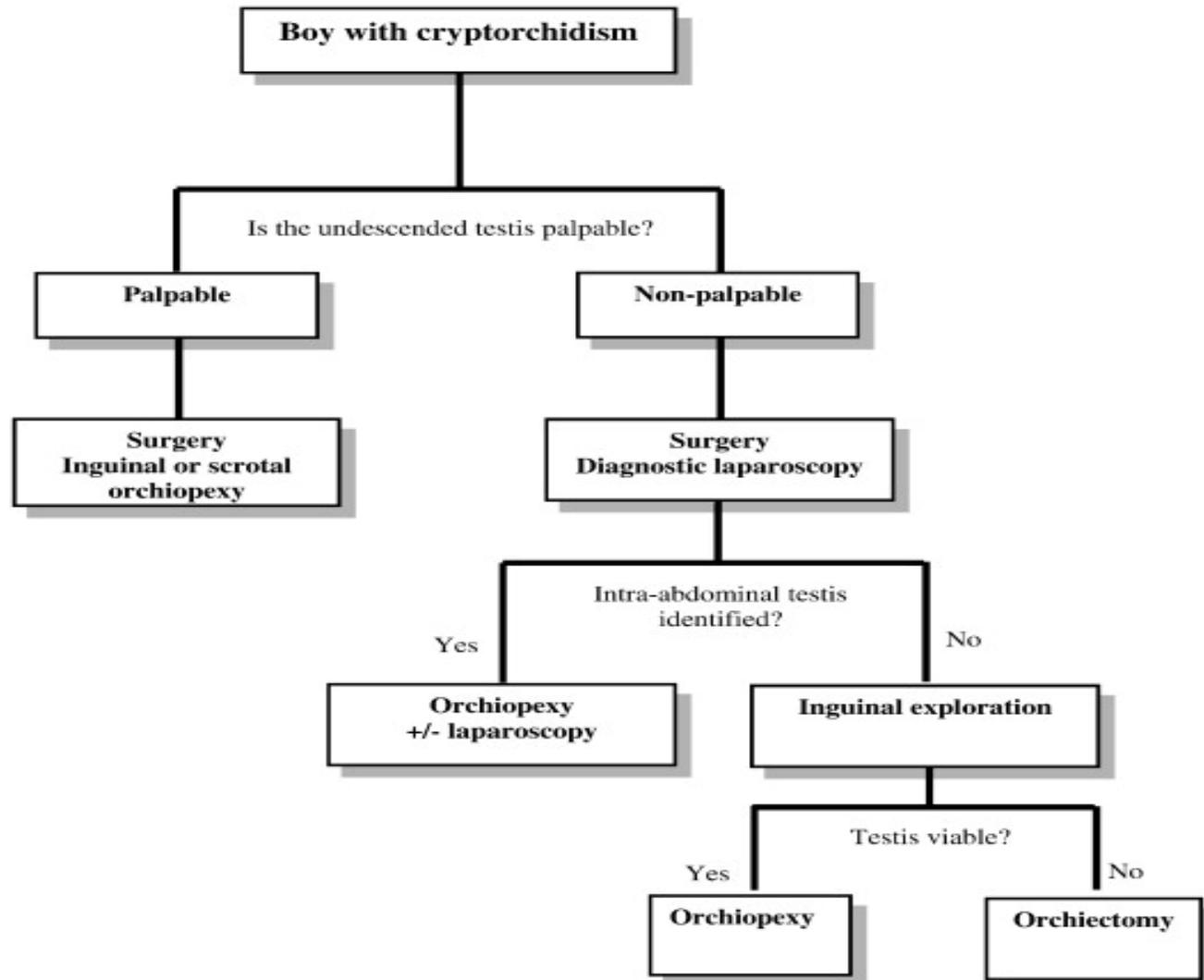
CLINICAL MANIFESTATIONS

- Empty, hypoplastic or poorly rugated scrotum / hemiscrotum
- Inguinal fullness
- Left side predominant if unilateral (58%)
- Bilateral with associated conditions (10%)

DIAGNOSTIC EVALUATION

- **An MRI scan with a contrast agent:** The doctor injects the agent into the bloodstream to give a clearer picture of whether the testicle is in the groin or abdomen.
- **A laparoscopy:** The doctor inserts a tiny tube with an attached camera through a small incision in the abdomen. If necessary, they can also perform corrective surgery using the same tool.
- **Open surgery:** In rare, complicated cases, surgeons will use this to explore the abdomen directly.

DIAGNOSTIC EVALUATION



COMPLICATION

- ❖ Local pain
- ❖ Skin discoloration
- ❖ Bleeding
- ❖ Infertility
- ❖ Infection
- ❖ Trauma to artery
- ❖ Failure rate
- ❖ Hematoma

MEDICAL/SURGICAL MANAGEMENT

❖ OBJECTIVE

- Reducing the risk of impairment of fertility
- Prevent testicular cancer and associated inguinal hernia.
 - Treatment is recommended anytime after six months of age. The time between six and 18 months of age is generally considered best, when taking into account surgical and anaesthetic factors.
 - Surgical therapy include “ Orchiopexy” (surgically positioning of the testes within the scrotal sac).
 - It is done under general anaesthesia, and the baby almost always go home the same day and usually acts entirely normal within one to two days.

MANAGEMENT

- An incision about an inch long is made in the groin area. The testicle is separated from all surrounding tissues so that it comes easily into the scrotum where it is stitched into place.
- After treatment, the testicle usually develops to normal size in the scrotum.
- However, in some cases the testicle is abnormal to start with and never grows properly.
- It is recommended that, as a teenager, these patients have regular physical examinations and be reminded to perform monthly testicular self-examination.

NURSING DIAGNOSIS

❖ Anxiety

Related to

- change in the health status of the child
- hospitalization & surgery of the child
- threat to self-concept

As evidenced by

- presence of empty scrotum and smaller size
- expressed concern about impending surgery or need for future surgery and procedure performed to correct the abnormality
- Increased apprehension and expressed concern about future infertility and effect on body image

NURSING INTERVENTION

- Assess origin and anxiety level and how it is expressed; need for information that will alleviate anxiety.
- Provide as much privacy to the child as possible during evaluations.
- Allow expression of concerns and opportunity to ask information about the condition, diagnostic and surgical procedures, effect of abnormal placement on testes and future fertility.
- Involve parents in decisions about care and routines as possible.
- Communicate with parents (and child if appropriate) and answer questions calmly and honestly; May utilize aids such as pictures, models, and drawings.

NURSING INTERVENTION

- Inform parents that surgery is usually done after the age of 1 but may be performed during the preschool years by the age of 5 if no spontaneous descent of testes happened.
- Provide parents with information about orchiopexy.
- Reassure the child that his penis will remain in place and that the surgery will not harm the male organ.
- Instruct parents and child in activity restrictions and play appropriate to age and trauma of surgery.
- Demonstrate and teach self-testicular examination and allow for return demonstration; inform to report any change felt.

NURSING DIAGNOSIS

❖ **Risk for Infection**

Related to

- Inadequate primary defenses (broken skin)

NURSING INTERVENTION

- Assess wound for tenderness, redness, swelling, increased local temperature, odor, and formation of pus.
- Carefully cleanse the perineal area of any urine or stool as needed; teach parents.
- Apply ice or a cold pack on the scrotal area for 10 to 20 minutes postoperatively as ordered.
- Administer antibiotic therapy as ordered.
- Reinforce the importance of finishing the complete course of antibiotic therapy.
- Educate the child to use clean undergarments or parents to change child's diaper frequently and not leave the child in a soiled diaper.

NURSING DIAGNOSIS

❖ **Risk for Impaired Skin Integrity**

Related to

- External factor of surgical incision.

NURSING INTERVENTION

- Assess incision site, observe for formation of hematoma, swelling, and presence of bleeding and wound drainage.
- Instruct the mother about the importance of proper nutrition and adequate fluid intake.
- Provide routine incisional care.
- Stress the importance of keeping the wound clean and dry. The incision should not be soaked for about 5 days.
- Instruct caregiver to not remove the white strips or clear plastic dressing.
- Instruct mother to keep the child's fingernails short or to use gloves when severe itching is present.
- Educate caregivers on skin and wound assessment and to watch out for signs and symptoms of infection, complications, and healing.

