Clinical Anatomy of Genitourinary system-II

Lecture 17

Learning Objectives

At the end of this session, the student should be able to:

1. Discuss the anatomy of the procedure of catheterization in males.

2. Enumerate the procedures of pudendal nerve block in females.

3. Identify the most dependent part of peritoneal pouch in females (i.e. site of accumulation of fluids, in standing position, such as pus in case of appendicitis or blood in case of ruptured ectopic pregnancy)

Suggested Ref:

Snell RS. Clinical Anatomy by Regions. 9th edition, P 240-330. 2012, Lippincott Williams & Wilkins.

Faiz O and Moffat D. Anatomy at a glance. P 54-61 2006, Blackwell Science, USA.

Ellis H. A clinical Anatomy; A revision and Applied Anatomy for Clinical Students. 11 edition, P 81-92, Blackwell Science, USA

Anatomy of catheterization of male urethra

The external orifice at the glans penis is the narrowest part of the entire urethra.

Within the glans, the urethra dilates to form the fossa terminalis (navicular fossa).

Near the posterior end of the fossa, a fold of mucous membrane projects into the lumen from the roof.

The membranous part of the urethra is narrow and fixed.

The prostatic part of the urethra is the widest and most dilatable part of the urethra.

By holding the penis upward, the S-shaped curve to the urethra is converted into a J-shaped curve.

Procedure

1. The patient lies in a supine position.

2. With gentle traction, the penis is held erect at right angles to the anterior abdominal wall. The lubricated catheter is passed through the narrow external urethral meatus. The catheter should pass easily along the penile urethra. On reaching the membranous part of the urethra, a slight resistance is felt because of the tone of the urethral sphincter and the surrounding rigid perineal membrane.

3. The penis is then lowered toward the thighs, and the catheter is gently pushed through the sphincter.

4. Passage of the catheter through the prostatic urethra and bladder neck should not present any difficulty.

Pudendal Nerve block

Area of Anesthesia:

Skin of the perineum;

Not abolishes sensation from the anterior part of the perineum (innervated by ilioinguinal genitofemoral nerves. So does not abolish pain from uterine contractions that ascend to spinal cord via sympathetic afferent nerves.

Indications: During the second stage of a difficult labor, when the presenting part of the fetus, is descending through the vulva, forceps delivery and episiotomy may be necessary.

Contd

Transvaginal procedure:

Ischial spine--bony landmark

Perineal procedure:

The bony landmark is the ischial tuberosity, palpated subcutaneously through the buttock.

The needle is introduced into the pudendal canal along the medial side of the tuberosity, canal lies about 1 in. deep to the free surface of ischial tuberosity. The local anesthetic is then infiltrated around the pudendal nerve.

Dependent part in the peritoneal cavity