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- **Renal Hematoma**
- This condition is a sequel to renal trauma
- Clinical signs, treatment and diagnosis as renal trauma
- **Renal and peri- renal abscess**
- Pyogenic bacteria carried in blood to the kidney can produce **abscessation** or diffuse **suppurative pyelonephritis**, **ascending infection**, especially when associated with an obstructive lesion resulting in hydronephrosis and stasis of urine may also causes **pyelonephritis**
- **Etiology:**
- 1. Bacterial infection
- 2. R. trauma
- 3. R.hematoma
- **Diagnosis:**
- Diagnosis confused with other lesion as fracture or diaphragmatic hernia.
- **Treatment:**
- If the condition is **unilateral** , a nephrectomy combined with excision of the abscess is the most effective treatment
- All foreign materials , such as **non –absorbable suture** that have become infection source must be removed
- care should be exercised to avoid abdominal contamination , even if the of abscess wall off administration of antimicrobial agent is essential
- if both kidneys are involved , the **prognosis is grave** and the surgery should limited to removing the foreign bodies , abscess or other possible causes of urinary obstruction
- **Solitary cyst**
- lesion usually are not less than 1 cm in diameter and there may be more than one cyst presence in same kidney rarely causes clinical signs .
- The fluid with in cyst is serous some what similar in character to the urine
- if the cyst became infected such signs of renal disease are exhibited :**fever, anorexia, thirst, polyuria , hematuria and pyuria.**
- **Treatment**
- Nephrectomy



Types	Indications (generally)
1. Partial nephrectomy: part of kidney are removed	Renal neoplasm
2. Simple nephrectomy: all the kidney are removed	Trauma, resulting in un controllable hemorrhage or urine leakage
3.Radical nephrectomy: all of one kidney is removed together with neighboring gland and lymph nodes	Hydronephrosis Urethral abnormalities that require surgical repair (avulsion stricture ,rupture
4. Bilateral nephrectomy :both kidneys are removed.	Polycystic kidney and solitary cyst Damaged kidney by infection Renal artery stenosis that cause hypertension A living donor as kidney transplantation

➤ **Renal calculi**

- The term of renal lithiasis mean the deposit in the kidney salts from the urine in form of:
- **sabulous material** or fine sand gravel or small concentration resembling coarse sand
- small calculi or strong capable of passage through the ureter into the bladder
- large calculi in capable of passage through the ureter
- in horse the calculi may attain a weight 4 pound
- -in ox seldom exceeds the volume of hazel nut
- -in dog large calculi may weight 3 ounce
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➤ **Etiology**

- 1. excessive proportion of certain salts in the food or water.
- 2. calculi are common in districts where the soil is of chalky nature



- 3. Ruminant fed with roots and fodder grown on land heavily dressed with artificial manure or graze on fields top dressed with lime or basso slag frequently suffer from lithiasis.
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- **symptom**
- 1. Renal calculi may present with out causing any apparent trouble, only detected incidentally during postmortem
- 2. Some clinical signs my be observed as colic, abdominal pain, **hematuria (the blood intimately mixed with urine which color red from the beginning to end urination)**.
- 3. Stiffness of join during movement, anorexia, whining and making frequent attempts to urinate.
- the most complications may occur are **hydrophrosis** and **pyelonephritis**
- **Diagnosis:**
- 1. Clinical signs.
- 2. Lab examination.
- 3. X-Rays.
- **Treatments:**
- 1. Medical and hygiene treatment.
- 2. Administration food with high concentration of mag. and calcium salts
- 3. Food mixed with sod. Bicarbonate.
- 4. Plentiful supply of water
- 5. Diuretics
- 6. Diminution of nitrogenous food that rich in oxalate
- 7. Nephrolithiatomy.
- **Contraindications to stone dissolution** :include **heart failure**, **edema**, **ascites**, **pleural effusion**, **hypertension**, **hepatic failure**, **renal failure**, and hypoalbuminemia.
- **Renal failure** is not always a contraindication for dissolution of struvite nephroliths.
- When surgery is performed to remove multiple small struvite calculi, removing all stone material is often difficult
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- **Pyelonephritis**
- 1 pyelitis Mean inflammation of pelvis and calices of kidney usually associated with nephritis, constituting **pyelonephritis**.
- 2.when pus retained in the organ the conditions termed **Pyonephrosis**.
- **Etiology**
- 1. Due to entrance of pathogenic bacteria into kidney which they may results by way of ureter (**ascending infection**) or through blood stream or lymphatic system (**descending infection**)
- 2.In this way it may be the results of **general infection** of **traumatic lesion** of the kidney or septic affections of bladder, urethra, vagina and uterus
- 3. Bacteria from the intestine may gain access to kidney directly through the **lymphatic stream**.
- 4. Retention of urine in the bladder causing stasis of the liquid in the ureter and pelvis or its refluxes towards these parts



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- 5. **Ancient infection** of kidney in case of cystitis or urethritis the female more often than the male as sequel of parturition
 - **Symptoms:**
 - 1. Pyuria presence pus in urine .
 - 2. Manifested by stiffness of movement
 - 3. pain evidence on external palpation of the lumber region
 - 4. Swelling detected by manipulation as **No.2** In large animals the ureter may be felt dilated with thickness of **child arm**
 - - .5. In general there are **digestive disturbance** ,comprising anorexia and loss of condition
 - 6. skin is dry and the coat harsh and staring, **frequent urination** in acute case there is febrile disturbance
 - - **Treatment:**
 - 1. Once the disease is established, treatment is little or no avail.
 - 2. Milk diet, diuretics
 - Antiseptic to the urino-genital tract are indicated (**salol, borate or benzoate of soda, hexamine**)
 - When pus accumulating in kidney surgical intervention is necessary (nephrectomy or nephretomy).
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