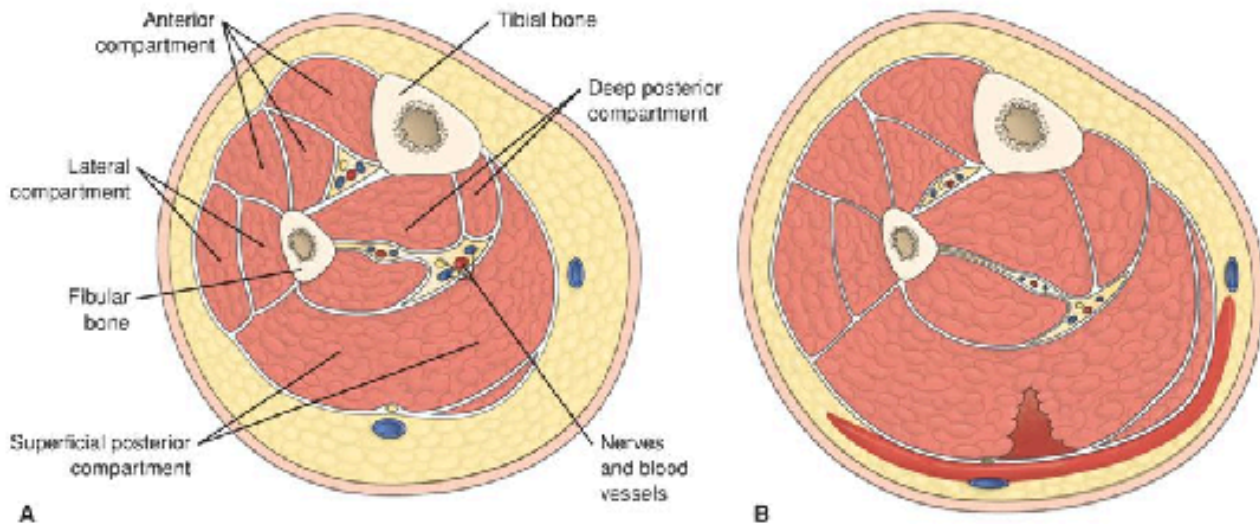


ACUTE COMPARTMENT SYNDROME



PATHOGENESIS

Compartment syndrome develops when swelling or bleeding occurs within a compartment. Common sites of acute compartment syndrome are the **legs and forearm**. Because the **fascia does not stretch**, this can cause **increased pressure** on the capillaries, nerves and muscles in the compartment. This decreases arterial blood flow which leads to necrosis. Never elevate the limb above heart level in these cases.

CLINICAL MANIFESTATION

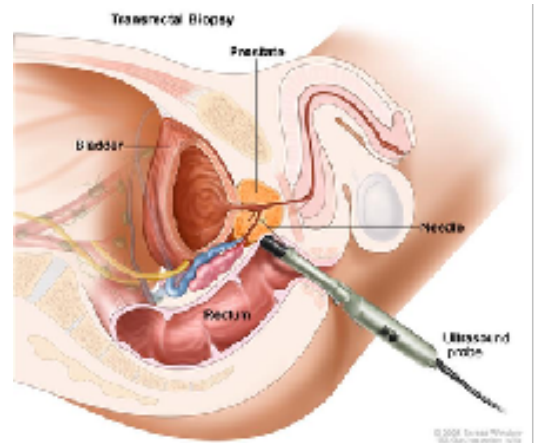
1. **Pain:** can be aggravated by passive stretching
2. **Parathesia:** Pin and needles → limb falling asleep
3. **Pallor:** Not pink → Dusky, pain, > 2 second capillary refill
4. **Paralysis:** Not be able to move the extremities
5. **Poikilothermia:** Temperature difference in the affected and non-affected limb
6. **Pulse:** No pulse the latest symptom.

DIAGNOSIS

- **Full Blood Count :** ↑ Creatinine Kinase
- **Rhabdomyolysis:** ↑ Creatinine Kinase . Myoglobin is also ↑ in urine
- **Urinalysis:** Will show red blood cells → Myoglobin
- **Manometer :** Measures pressure

BIOSPY:

- A small probe containing an ultrasound generator and sampling needles known as Trans Rectal Ultra Sound (TRUS) is inserted into the anus.
- The ultrasound generates an image of the prostate on a computer screen and guides the doctor to insert the selected areas of the prostate.
- A small tissue sample taken with a spring loaded syringe usually by a urologist.



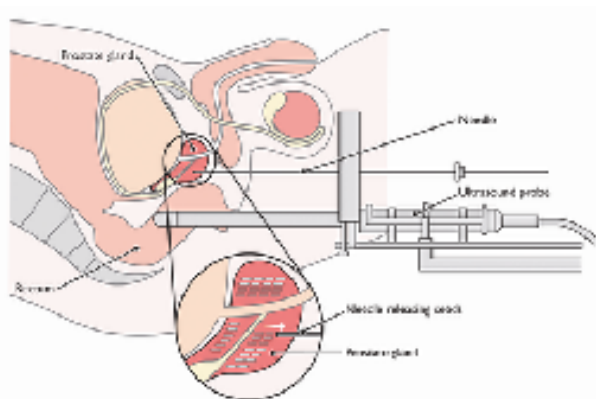
TREATMENT

Radiotherapy

- Treatment that uses beams of intense energy to destroy cancerous cells.
- Short pulses of tightly focused beams of x-rays are delivered from outside the body into the prostate for a few minutes each day.
- Radiation therapy damages cells by destroying the genetic material that controls how cells grow and divide.
- Both healthy and cancerous cells are damaged by radiation therapy.

Brachytherapy

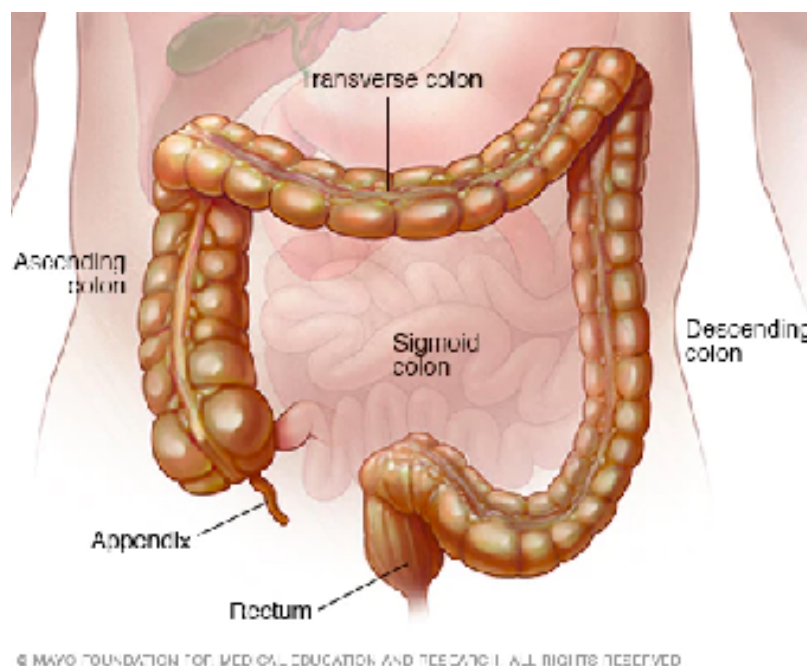
- Procedure performed under anaesthetic where radioactive seeds are placed within the prostate.
- There is a lower incidence of impotence, urinary incontinence and bowel dysfunction and sexual dysfunction as the procedure is minimally invasive.
- Recover is faster in comparison to conventional surgery. Patients are often able to return to their usual activities with a few days.



ULCERATIVE COLITIS

PATHOGENESIS

- Refers to inflammation specifically to the colon or the large intestine
- Unknown cause
- Ulcers along the inner-surface of lumen of the large intestine (**sigmoid colon+rectum**)
- Ulcers are spots in the mucosa where the tissue has eroded away and left behind open sores or breaks
- Autoimmune disease ; may be caused by smoking, stress or diet, antigens



© MAYO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH. ALL RIGHTS RESERVED

CLINICAL MANIFESTATION

- Frequent diarrhoea (10 - 20 stools)
- Malnutrition
- ↑ Pulse Rate
- Abdominal tenderness & Distension
- Bloody Stools
- **Lower Left Quadrant** Cramping
- Weight Loss, Anaemia, Fever

SYSTEMIC MANIFESTATION

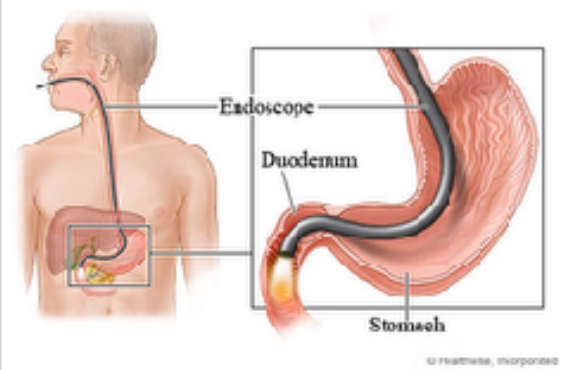

- Polyarthritits (many joint pains)
- Uveitis (part of the eye)
- Blood clots
- Skin & Mucus membrane lesion
- Risk of gallstones, kidney stones, urethral obstruction

.

DIETARY

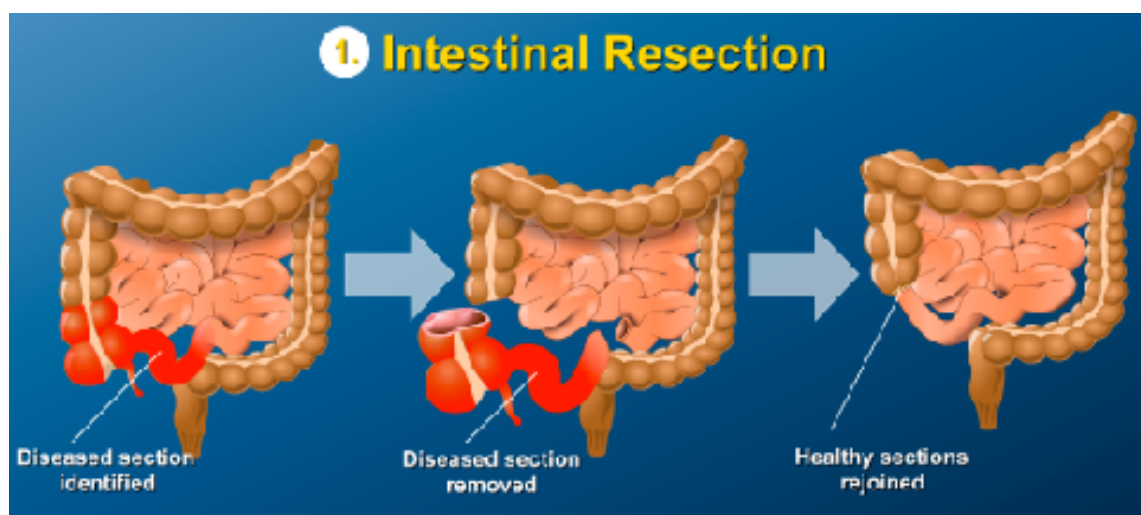
- Avoid fatty, greasy, spicy or fried foods
- Limit dairy productions (Crohn's hard to digest lactose)
- Avoid caffeine
- Enteral (food through the nose) ; Ensure
- Total Parenteral Nutrition (TPN) ; through the vein - hypertonic glucose

DIAGNOSIS

ENDOSCOPY	COLONOSCOPY
Performed under local anaesthetic or IV sedation	Performed under IV sedation
A flexible fiberoptic endoscope	A flexible fiberoptic scope
Direct visual of oesophagus, stomach, duodenum	Opportunities for biopsies and removal of polyps
	

SURGICAL

RESECTION	Removes an affect portion of the bowel.
------------------	---



Health Variations 1

1

LEARNING OBJECTIVES

Preoperative nursing principles

- The experience of pain and pain management
- Maintaining fluid balance

PAIN

NOCICEPTIVE PAIN

- The most common type of pain
- Nociceptors are afferent nerve fibre endings in all body tissue except the brain that react to pain (noxious stimuli) and endogenous chemical substances

NEUROPATHIC PAIN

- Caused by injury or disease of the peripheral or central nervous system
- There is a central or peripheral malfunction in the pain signalling pathway
 - **Complex Regional Pain Syndrome (CRPS)**: neuropathic pain that is caused by nerve damage from major or minor trauma
 - **Neuralgias**: painful conditions result from peripheral nerve damage caused by infections or diseases

PSYCHOGENIC PAIN

- report of pain, no apparent underlining pathology

ACUTE PAIN

- sudden onset, lasts less than 3 months
- physiologic pain (serves a protective function)
- often result from inflammation, surgery, tissue trauma
- 3 main types: somatic pain, visceral pain, referred pain

CHRONIC PAIN

- persistent, on going pain - lasts more than 3 months
- pathologic
- may not have an identifiable cause; arises from an acute situation

BREAKTHROUGH PAIN

- occurs between doses of analgesia
- analgesia: the inability to feel pain