Medical Conditions Associated with Obesity

Insulin resistance

- Prediabetes
- Diabetes mellitus type 2

Metabolic Syndrome

- Atherosclerosis
- Hyperlipidemia (Hypercholesterolemia)
- Hypertension (High blood pressure)
- Acanthosis nigrans

Kidney disease

- Glomerulopathy

Kidney Stones

Gall stones (Cholelithiasis)

- For every 1 unit increase in BMI is 7% increased risk of gall stones

Increased risk of blood clots

Asthma (made worse by obesity)

Stroke

- For every 1 unit increase in BMI there is 4% increase in ischemic stroke
- 6% increase in hemorrhagic stroke

New onset of Atrial Fibrillation

- For every 1 unit increase in BMI there is 4% increase risk of atrial fibrillation

Non-alcoholic fatty liver disease (NAFLD)

- Hepatic steatosis
- Non-alcoholic steatohepatitis (NASH) that may lead to liver failure
- NAFLD is present in up to 57-74% of those with BMI >30 and up to 90% in those with BMI of 40 or more.

Obstructive sleep Apnea

Present in 30% of those with BMI greater than 30 and 50-98% among those with BMI greater than 40

Increased risk of sleep apnea when neck circumference is greater than 17 in men and greater than 16 in women.

Sleep apnea is a condition associated with abnormal breathing during sleep, repeated awaking, fragmentation of sleep, low oxygen concentration in the blood. This results in impairment of cognitive function daytime somnolence (or sleepiness). Medical conditions associated with sleep apnea may include cardiac arrhythmias, (irregular heart beat) elevated pressure in the lungs, (Pulmonary hypertension), stroke, enlargement of the right side of the heart.

Dementia (Alzheimer's dementia)

- Increase risk in women by age 70 years

Gestational diabetes (diabetes diagnosed for the first time after 20 weeks of pregnancy)

Preeclampsia (hypertensive disease of pregnancy)

Diminished sex drive

- Diminished libido
- Erectile dysfunction

Infertility

- Low sperm count
- Infrequent or absence of ovulation

Polycystic ovarian disease associated with increased acne abnormal hair distribution

Mood, anxiety and personality disorders

- There is a 1.5- 2 fold increased risk of depression among those with BMI >30
- Low esteem
- Dissatisfaction with body image

Shortness of breath

Conditions associated with nerve compression

- Carpal tunnel syndrome
- Meralgia paresthetica

Osteoarthritis

- Mostly of hips and knees

Low back pain

Balance (gait) problems

Reflux disease

Urinary incontinence

Hernias

Venous stasis ulcer

Skin tags

Cancer

Obesity is associated with colon cancer, post-menopausal (after menopause) breast cancer, ovarian cancer, cancer of the pancreas, brain cancer, multiple myeloma, non-Hodgkin's lymphoma.

There is increased risk of cancers of the kidney, thyroid, gallbladder, uterus and leukemia for every 5 units increase in BMI. There is decreased risk of post-menopausal breast cancer with underweight.

Cancers associated with thinness (underweight)

- Lung cancer, oral (mouth) cancer, stomach cancer, esophageal cancer.

Diseases made worse with weight loss.

Congestive heart failure

May be worse with weight loss (obesity paradox)

Kidney failure on hemodialysis

- May be worse with weight loss (obesity paradox)

Suicide rate 5x higher after gastric bypass surgery.