**ENDOCRINOLOGY**

Obesity

Is a condition in which excess fat accumulates in the body mostly in subcutaneous tissue.

It occurs when dietary intake exceeds energy expenditure.

It is a common problem that can be defined by using the body mass index

Obesity is considered an important clinical condition because it is a risk factor for many diseases:

type II D.M., hyperlipidemia, hypertension, atherosclerosis & metabolic syndrome X.

***Sleep apnoea*** which means stop breathing during sleep & it is common in the very obese persons

Obesity also may lead to gastro-oesophageal reflux diseases

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increase risk of cancer of the breast, prostate,colon & endometrium,

80% of the human obesity is due to genetic factors

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| melanocyte stimulating hormone (MSH) which has a role in controlling appetite & satiety i.e. regulate hypothalamic control of food intake. | ghrelin which is secreted by the tissue of an empty stomach to stimulate appetite by its action on the hypothalamus.  When a person is subjected to gastric surgery, this will lead to decrease ghrelin & therefore decrease appetite (poor appetite). | leptin which is secreted by some subcutaneous adipose tissue in response to fat storae & it is centrally act to promote satiely & increase body metabolic rate so it suppress appetite.  Congenital leptin deficiency accounts for 1-3 % in early onset morbid obesity. |

***Cushings syndrome:*** *a* condition related to endocrine & obesity, in which there is an increase in cortisol activity lead to central obesity with large face (moon face) & supraclavicular fat accumulation.

Menopause is associated with a decrease in the basal metabolic rate which increases the body weight

weight gain is greatest in perimenopausal

Metabolic syndrome X: is a condition in which people tend to have intraabdominal or central obesity & those people develop insulin resistance leading to hyperinsulinaemia but at the same time β- cells of the pancreas will be exhausted & develop impaired glucose tolerance & type II D.M.

Other feature is arterial hypertension, there will be hypertriglyceridemia & decrease in high density lipoprotein cholesterol (HDL) which in turn lead to atherosclerosis.

Other condition lead to obesity is polycystic ovarian syndrome

Hypothalamic obesity in which there is 1-2%of the morbidly obese persons have been found to lack leptin & when they treated with leptin, they dramatically have weight reduction.

**Weight loss**

loss is > 3kg in couple of months it is significant & there

may be a disease.

Causes of weight loss:

1.Psychiatric, anorexia nervosa, depression

2.Systemic diseases:

Tuberculosis

Recurrent infection

HIV / AIDS

3.Uncontrolled D.M.

4.Hyperthyroidism

5.Addisons disease

6.GIT diseases:

• Malabsorption

• Helminthes infection

7.Malignant diseases

8.Depression of appetite due to renal failure

9.Parasites: (taenia saginata)

If the person says that he eats too much but loses weight so we can expect that he probably has hyperthyroidism, parasite infection (Taenia Saginata), type I.D.M. or malabsorption syndrome.