

SUMMARY AND CONCLUSION

Obesity is the new global epidemic threatening millions of people to have its serious complications and its morbid associated diseases. It's found world-wide. In developed countries is mainly due to the western food style and the junk food meals high in carbohydrates & fat together with high-caloric sweets and other luxurious foods. While in developing countries, it's spread due to the main dependence on cheap foods which are characterized with low-protein and high-calorie content.

Obesity is generally caused by either Primary or Secondary causes. Its primary causes include factors increasing energy intake [food availability, social, psychological] and factors decreasing energy expenditure. Secondary causes include **(1) Genetic** causes [eg Prader-Willi syndrome, Bardet-Biedel syndrome, MOMO syndrome, Alstrom syndrome, Cohen syndrome, Frohlich syndrome] and **(2) Endocrinal** Causes [eg Hypothyroidism, Polycystic ovarian syndrome, Cushing syndrome, Growth hormone deficiency, Insulinoma, PseudoHypothyroidism and Medications].

Obesity has been found to be associated with many chronic diseases including **Cardiovascular diseases** [eg Ischemic heart disease, Congestive heart failure], **GastroIntestinal disease** [eg GERD], **Endocrine and Metabolic** [eg Diabetes Mellitus, Polycystic Ovary disease, Dyslipidemia], **Respiratory** [eg Obstructive Sleep

Apnea], **Musculoskeletal** [eg Gout, Osteoarthritis], **Neurologic** [eg Stroke, Idiopathic intracranial hypertension], and many other chronic diseases.

Obesity as a disease can be managed by many ways including: Diet, Exercise, Medications and Bariatric surgery.

Of the most serious associations with obesity is the cancer with its various types, as listed in detail in the research. For example, It has been proved to be associated with an increased risk of **Colorectal cancer**, both in men and women. There is a strong and growing body of evidence to suggest that obesity and colon cancer are causally linked by mechanisms involving chronic, asymptomatic inflammatory activity in the colonic mucosa.

Also, There's an independent dose–response relations between body-mass index and the risk of **Renal-Cell Cancer** and between diastolic and systolic blood pressure and the risk of renal-cell cancer, with a greater risk in men with an even slightly higher body-mass index or blood pressure than in their counterparts with lower values.

Obesity has been shown to increase **Breast Cancer** risk in postmenopausal women by 20% to 35%. Moreover, high body mass index has been found to be significantly associated with an increased risk of breast cancer in both premenopausal and postmenopausal populations. In a very recent report on breast cancer, obese patients

presented with larger, more advanced tumors and aggressive cancer pathological features,

A direct association with body mass measures was also found in certain studies focusing on fatal or advanced **Prostate Cancer** suggesting that high BMI may facilitate the progression of prostatic neoplasm.

A similar relationship was proved between obesity and **Endometrial cancer**, where obesity was found to be an important risk factor for development of endometrial cancer increasing its incidence significantly and adding a serious threat especially in the postmenopausal women.

From this, it's clear how important it is to combat obesity being the new epidemic with its many serious complications on the various body systems. Individuals should be encouraged to follow a more healthy lifestyle with better diet control. Also, signs and symptoms of any malignant transformation should be detected and treated in obese individuals being more susceptible to certain cancers, especially those with metabolic syndrome or diabetes mellitus.

RECOMMENDATIONS

1- Prevention and early treatment of overweight and obesity using lifestyle modifications, diet control and other means of therapy.

2- Early detection and treatment of any cancers in obese patients and in those with metabolic syndrome and diabetes mellitus, being more susceptible to certain cancers.