SUMMARY

Definition:

The term morbid obesity describes the status of an individual who has reached two to three times his ideal weight as defined by insurance tables and who has maintained this level for five or more years, despite efforts to lose that weight. Others have defined morbid obesity as weight in excess of 100 pounds above that set by the insurance table as an ideal weight. (Scott et al., 1977).

Causes:-

There is much disagreement as to its cause. Obesity may begin in early childhood when parents reinforce eating behaviours with food. Many parents believe that the more they feed their children the healther the child will be. Psychological problems have been implicated, as some may use food as a crutch to reduce anxiety and relieve depression. A large hereditary component probably exists since data show a high correlation for weight among monozygotic twins. (Zollinger, 1983). In most cases, massive obesity is caused by an extensive increase in food intake and a decrease in physical activity. (Braasch, 1971).

Diagnosis:

There are many methods of diagnosis, the easiest is by puthing the weight in relation to height by comparison to normal values.

Classification:-

There is no one satisfactory classification of obesity.

A clinical classification is:-

. Life long Obesity. . Adult onset Obesity.

In the life-long Obesity, there is an increased adipose cell number and size. While in adult onset type, there is increased cell size only.

Serious Health Consequences of Obesity:-

1. ↑ risk of Mortality at all ages.
2. The risk of diabetes increases progressively with increase in weight.
3. Increased level of triglycerides and Cholesterol in blood.
4. Increased atherosclerotic cardiovascular diseases.
5. Increased risk of hypertension.
6. Cholecystitis and Cholelithiasis.
7. Alveolar Hypo-ventellation.
8. Arthritis.
9. Obstetrical Problems.
10. Surgical Problems.

SURGICAL MANAGEMENT:-

The surgical approach to massive obesity is based uponthe dual premises that severe obesity is a serious disease of life shortening severity and that long-term medical therapy is usually unsatisfactory (Scott et al., 1977). The surgical procedures that intensively reviewed are the gastric bypass and the jejunoileal bypass. Gastroplasty, gastric partitioning, vagotomy and jaw wiring also are discussed. Other procedures that are in still earlier stages of development; for example, the bilio-intestinal and bilio-pancreatic are considered as well.

Jaw-wiring could be a relatively safe and effective method in poor-risk obese patients who are

in cardiac or pulmonary failure and who are being prepared for surgery. (Pories, 1981).

The gastric bypass operation is designed to decrease the size of the food receptacle so that a limited number of calories can be ingested. All food ingested is absorbed normally, thus eliminating problems that may be associated with metabolic derangements. Although it is possible to overeat the gastric pouch, the overall result of gastric bypass, in terms of weight loss, is quite satisfactory, and the mortality rate of less than 2 per cent and the morbidity rate of less than 20 per cent are also acceptable. Late complications following gastric bypass are low: specifically, nephrolithiasis is 8 to 10 times less frequent than often jejunoileal bypass. Liver disease has not been seen following gastric bypass. (Griffen,1979). However, follow-up has been only 2 to 3 years compared to 5 to 7 years for the jejunoileal bypass. Moreover, gastric bypass appears to be a technically more demanding procedure. (Van Itallie and Burton, 1979).

Gastroplasty and gastric partitioning are two variants of gastric bypass. Various technical modifications of these operations are being performed in attempts to counter-act staple-line disruption, and widening of the outlet. (VanItallie and Kral, 1981).

Selected patients of morbid obesity with hyperinsulinemia seem to benefit from truncal vagotomy without a drainage procedure. The operation is simple, rapid and the side effects are well known. It must still be considered experimental, awaiting

further research and long term follow up in a well-controlled series. (Kral, 1980).

The intestinal bypass operation has come into wide use as a method for treating the grossly obese patient. Because it carries risks of morbidity and mortality, it is only suitable for those who meet certain minimal criteria. Rucker et al. (1982) mentioned that there are three different groups who are candidates for jejunoileal bypass - the hypercholesterolemic, the diabetic, and the patient who is 400 pounds over-weight. During the first year after surgery, weight loss varies from 9.1 to 69.0 Kg. These patients have shown improved self-esteem and reduction in the amount of depression. Mortality for this operation is approximately 4%, many serious complications (liver failure, pulmonary embolus, improper wound healing, severe loss of minerals, and vitamines deficiencies) occur. Hyperoxaluira may result from increased intestinal absorption. A dilated colon (Pseudocolonic obstruction) may develop from bacterial over-growth in the distal segment of the bypassed intestine. Since these serious complications affect 40% of the patients, the operation should be done by trained and skilled physicians who will also be able to manage the long-term post-operative period. (Bray, et al., 1976).

Two modifications of jejunoileal bypass have been proposed to do away with the blind loop: bilio-intestinal shunt and bilio-pancreatic bypass. These procedures seem promising in selected cases. (Van Itallie and Kral, 1981).

Ideal Operation:

The ideal operation, in case of surgical treatment of obese patients, should be effective in producing permenant weight loss, technically feasible, safe in terms of immediate and late morbidity and mortality, and reversible later on.

Table (15)

Criteria to Follow in Choosing the Bypass	
1. Jejunoileal Bypass	Obese patient in good general condition greatly over-weight aged between 18 and 55 Y.,
2. Gastric Bypass	Elderly Obese or over 55 years old.
3. Bilio-Pancreatic Bypass	Hepato-pathic obese or over 55 years old.
4. Bilio-intestinal Bypass	Hepato-pathic obese, aged between 18 to 55 Y.,

Table(16): Results of various types of digestive Bypass

85-90%	Excellent loss of Wt and a return to a normal working and social life.
0-5 %	Overall mortality.
5%	Insufficient Wt. loss.
2-3%	Unsuccessful Wt. loss.
1-2%	Excessive Wt. loss.

Plastic surgery:

Patients who have sustained massive weight loss should be informed of the possibilities of reconstructive plastic surgery. (Shons, 1979).

Surgical risks:

Surgical risk is in general greater in obesity. Mortality figures for a variety of surgical procedures may be two to three-fold higher for the obese than for the nonobese. Contributing factors include increased anaesthetic risk, technical difficulties and longer duration of procedures, and increased atelectasis, wound action, and thrombophlebitis postoperatively. (Bierman, 1979).