اپروچ به آقای ۲۲ ساله با چاقی در درمانگاه پزشکی خانواده

استاد راهنما: استاد عبادتی

ارائه دهنده: شقایق کرمی ، کارورز پزشکی خانواده

Chief complaint

بیمار اقای ۲۲ ساله چاق با شکایت از ضایعات قرمز رنگ متعدد در اطراف شکم

Present illness

بیمار اقای ۲۲ ساله با شکایت از ضایعات کراسته منتشر در ناحیه هایپوگاستراز ۱۰ روز قبل که به درمانگاه پزشکی خانواده مراجعه کرده اند. ضایعات به صورت خارشی بودند و به تدریج تشدید پیدا کرده اند.

Present illness

در هنگام مراجعه :ضایعات در قسمت های دیگر رویت نشد. / سابقه مسافرت اخیر(-)/علایم کورایز (-)/خروج چرک و ترشحات از محل ضایعات در حال حاضر (-)/ تب (-)/ مصرف اخیر دارو (-)

PMH: -

PSH: -

AH: -

HH: مصرف الکل در حد یک بارتا دو بار در هفته(+) / سیگار (+)

FH: -

Physical examination

بیمار اقای جوان هوشیار و اورینته

ill - toxic-

ملتحمه pale نیست اسکلرا icteric نیست کاشکتیک نیست

V/S:BP: 125/80 RR: 17 T: 36.8 PR: 92 SPO2: 96 %

صورت بدون اختلال حسی حرکات چشم نرمال

سمع قلب S1و S2بدون سوفل سمع ریه نرمال و قرینه بدون کاهش صدا

شکم بدون دیستنشن ، ارگانومگالی ، اسکار جراحی،نرم بدون تندرس ریباند و گاردینگ

معاینه اندام ها : نرمال ، نبض ها پر و قرینه بدون دیفکت حسی و حرکتی.

معاینه اعصاب کرانیال : نرمال

مردمک ها مید سایز و ری اکیتو

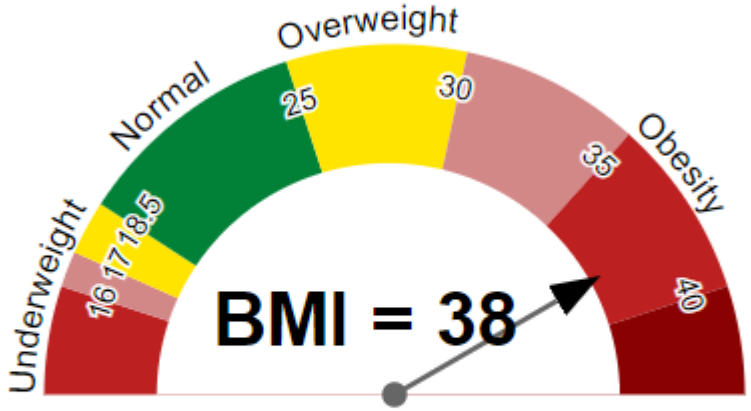
پوست : پتشی (_)/ پورپورا(-)/ اریتم (_)

Physical examination

- height = 185 c.m.
- Weight = 130 kg
- BMI= 38

Result

BMI = 38 kg/m^2 (Obese Class II)



- Healthy BMI range: 18.5 kg/m^2 - 25 kg/m^2
- Healthy weight for the height: 63.3 kg - 85.6 kg
- Lose 44.4 kg to reach a BMI of 25 kg/m^2.
- BMI Prime: 1.52
- Ponderal Index: 20.5 kg/m^3

STEP 1 – ASK

Ask the patient permission

STEP 2 – ASSESS

Assessment of an individual living with obesity

STEP 3 – ADVISE

Discussion of the core treatment options

STEP 4 – AGREE

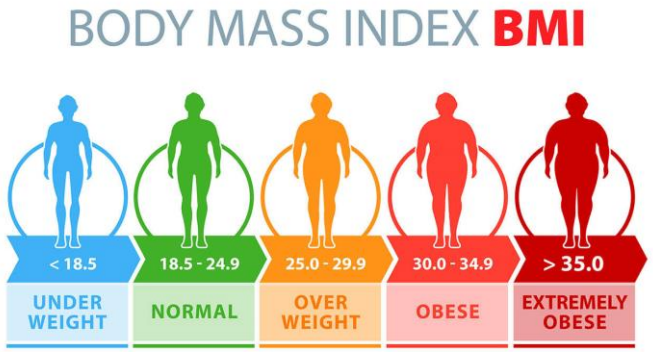
Agreement regarding goals of therapy

STEP 5 – ASSIST

Continued follow-up and reassessments

Obesity:

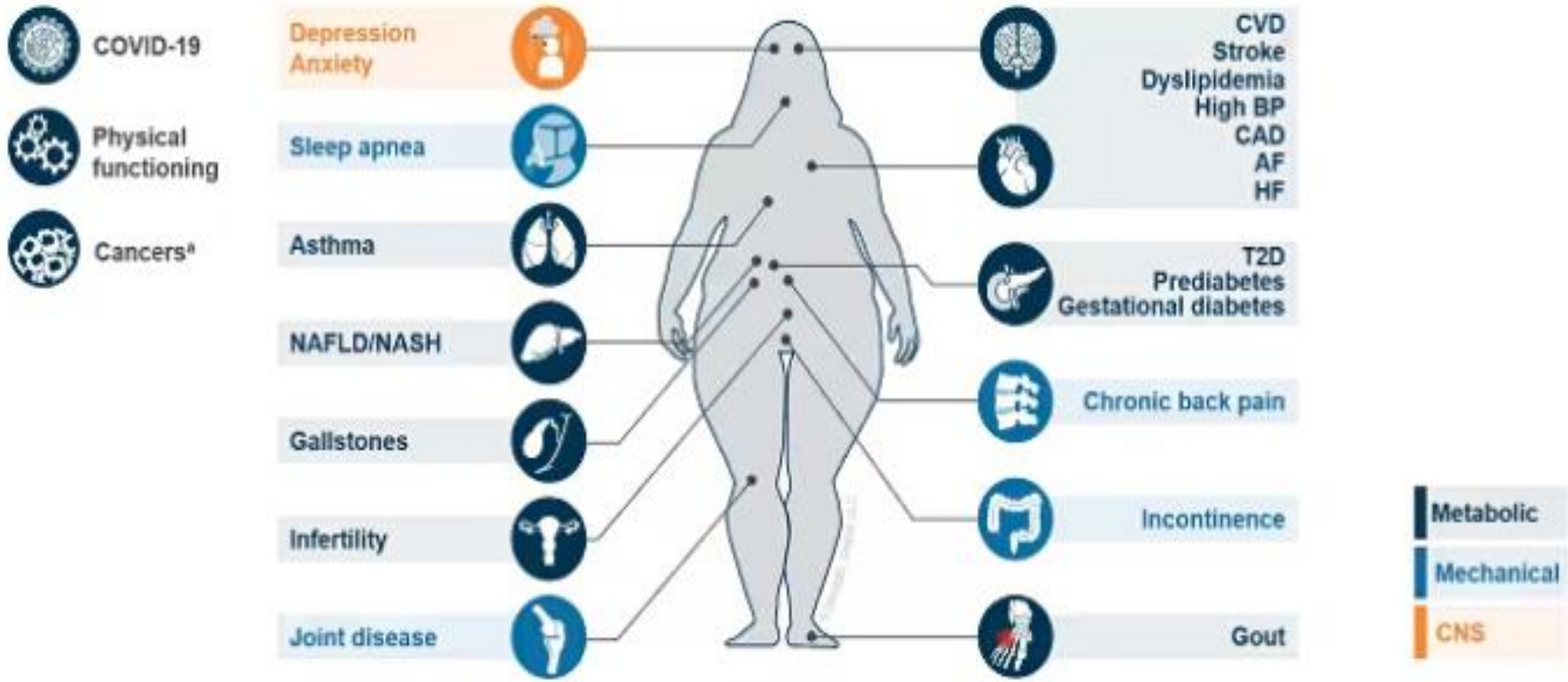
- . Overweight is defined as a BMI of 25 to 29.9 kg/m2;
- obesity is defined as a BMI of ≥30 kg/m2.
- Severe obesity is defined as a BMI ≥40 kg/m2 (or ≥35 kg/m2 in the presence of comorbidities)
- Obesity – ≥30 kg/m2 •
- Class I – 30.0 to 34.9 kg/m2 •
- Class II – 35.0 to 39.9 kg/m2
- Class III – ≥40 kg/m2 (also referred to as severe, extreme, or massive obesity)



Morbidity:

- Obesity is a chronic, often progressive metabolic disease, associated with an increase in mortality and morbidity, that is increasing in prevalence in adults.
- weight loss via lifestyle, pharmacologic therapy, or bariatric surgical procedures has been shown to reduce a wide array of weight-related morbidity
- intensive lifestyle modification focusing on weight loss reduced the rate of progression from impaired glucose tolerance to diabetes over three years
- There was also a persistent reduction in risk factors for cardiovascular disease (CVD) over the years.

Weight-Related Conditions[12]



Risk factors:

1-Genetics :

- If a young person has one biological parent with obesity, their risk of obesity is increased three- to fourfold compared with those who do not. Having two biological parents with obesity is associated with a greater than 10-fold increased risk of obesity.
- Rare forms of obesity result from certain genetic abnormalities, including Prader-Willi syndrome, Bardet-Biedl syndrome, and the monogenic obesities: melanocortin 4 receptor deficiency (the most common), leptin and leptin receptor deficiencies, and proopiomelanocortin (POMC) deficiency

Risk factors:

- 2-Age and Weight
- Elevated maternal body mass index (BMI) has been associated with increased fat mass in infants and an increased risk of obesity and metabolic disease in adult offspring. Excessive gestational weight gain, gestational diabetes, and maternal type 2 diabetes can all predispose to adult obesity in o#spring, demonstrating that both maternal BMI and glycemia play a role in determining adiposity in offspring.
- Weight gain in adulthood
- Menopause and weight

Risk factors: Lifestyle

- Dietary factors
- Physical activity and inactivity
- Sleep patterns
- Smoking

Risk factors: medications

- Antipsychotic agents
- Antidepressants
- Antiseizure medications
- Hypoglycemic medications
- Hormonal contraception

Risk factors: conditions associated with weight gain

- Hypothyroidism
- Cushing's syndrome
- Hypothalamic obesity
- Growth hormone de!ciency
- The gut microbiome
- Exposure to endocrine-disrupting chemicals

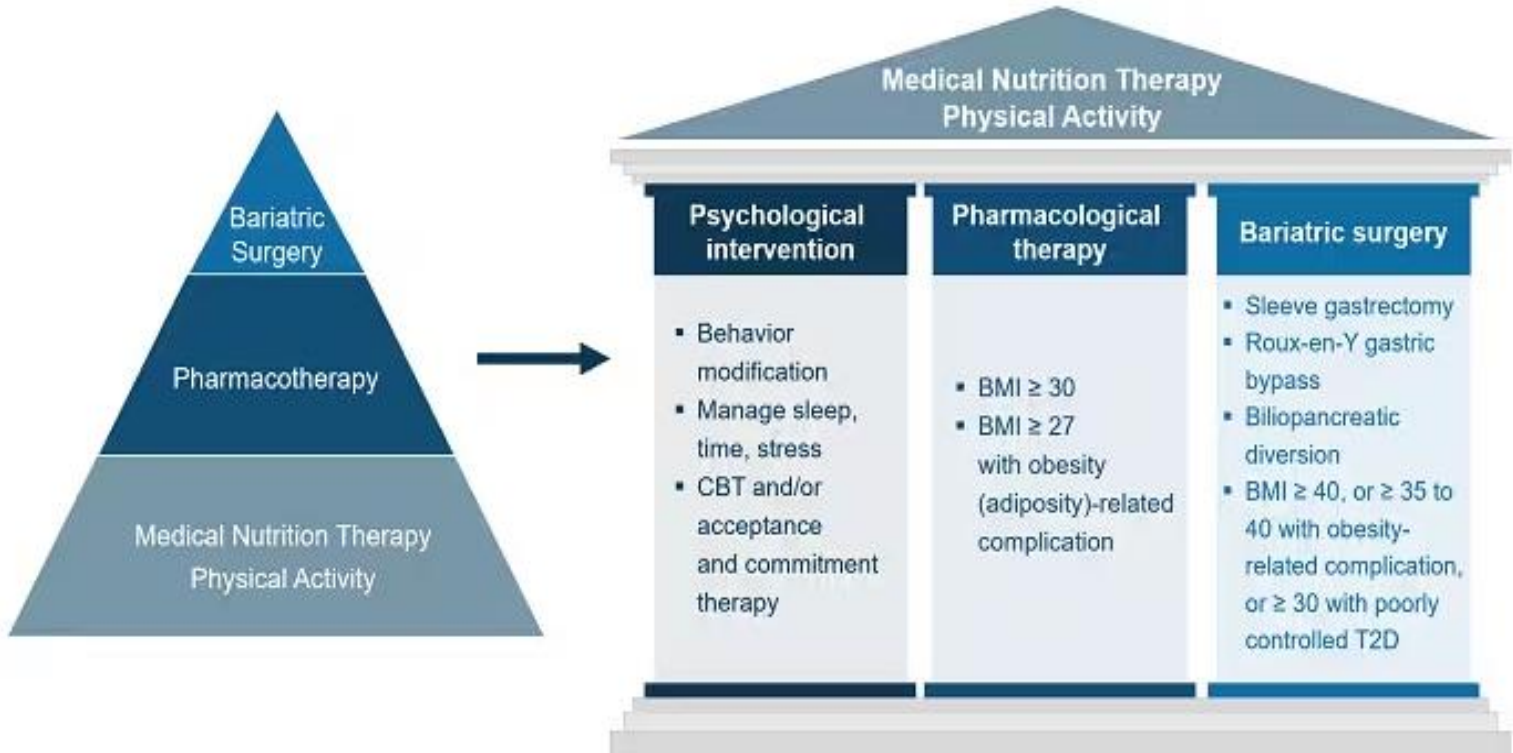
What to do in the first place:

- The goal of therapy is to prevent, treat, or reverse the complications of obesity and improve quality of life.
- Little or no risk – A BMI of 20 to 25 kg/m2 is associated with little or no increased risk unless waist circumference is high (a marker of increased cardiometabolic risk) or the person has gained more than 10 kg since age 18 years. Asian individuals start to incur risk, even in this low range (ie, BMI >23 kg/m2).
- Low risk – Individuals with a BMI of 25 to 29.9 kg/m2, who do not have risk factors for CVD or other weight-related comorbidities, may be described as having low risk, particularly if they are older. They should receive counseling on prevention of weight gain, including advice on dietary habits and physical activity.

- Moderate risk – Individuals with a BMI between 25 and 29.9 kg/m2 and with one or more risk factors for CVD (diabetes, hypertension, dyslipidemia), or with a BMI of 30 to 34.9 kg/m2, are at moderate risk. Such patients should be ordered or referred to intensive, multicomponent behavioral intervention. This includes tools and strategies to make dietary changes, increase physical activity, and support and maintain weight loss. Pharmacologic therapy should also be considered.

- High risk – Individuals with a BMI of 35 to 40 kg/m2 are at high risk, especially those ages 20 to 39,as well as those with a BMI above 40 kg/m2. Individuals in the highest-risk categories should receive the most aggressive treatment (intensive, multicomponent behavioral intervention, pharmacologic therapy, bariatric surgery).

Prior Pyramid vs Recent Pillar Approaches to Obesity Management[1]



Initial treatment:

- Comprehensive lifestyle intervention
- Dietary therapy
- Exercise
- Behavior modification
- Drug therapy
- Bariatric surgery

Non-pharmacologic approaches:

- The management of overweight and obesity should include a combination of diet, exercise, and behavioral modification.

- Physical inactivity is related to weight gain and increased risk of cardiovascular disease. Increasing the level of physical activity would be beneficial to all ages and all groups, particularly for the prevention of obesity.

Non-pharmacologic approaches:

- In moderately overweight adults, exercise programs added to diets with moderate to severe caloric restriction have only a modest effect upon weight loss.

- However, adding exercise to caloric restriction may have other important benefits independent of weight loss. Physical activity attenuates the diet-induced loss of muscle mass, improves physical functioning, and may offset the decrease in total energy expenditure that occurs with weight loss, such that the calorie restriction required to match energy expenditure is more easily achieved.

Non-pharmacologic approaches:

- In older adults with obesity, the combination of aerobic plus resistance exercise improves functional status more than either type of exercise alone.
- Physical exercise and activity are important for preventing weight regain after successful weight loss.
- There appears to be a dose effect for physical activity and weight loss, and much greater amounts of exercise are necessary to produce significant weight loss in the absence of a calorically restricted diet. Therefore, when weight loss is the desired goal, a diet should be combined with physical activity and the activity gradually increased over time as tolerated by the patient. For many individuals, >60 minutes per day of activity may be required to prevent weight regain following a significant weight loss

Pharmacologic approaches:

Candidates for drug therapy:

Candidates for drug therapy include those individuals with a body mass index (BMI) ≥30 kg/m2, or a BMI of 27 to 29.9 kg/m2 with weight-related comorbidities, who have not met weight-loss goals (loss of at least 5 percent of total body weight at three to six months) with comprehensive lifestyle intervention alone. The decision to initiate drug therapy should be individualized, weighing the risks and benefits of all treatment options (lifestyle, pharmacologic, device, surgical).

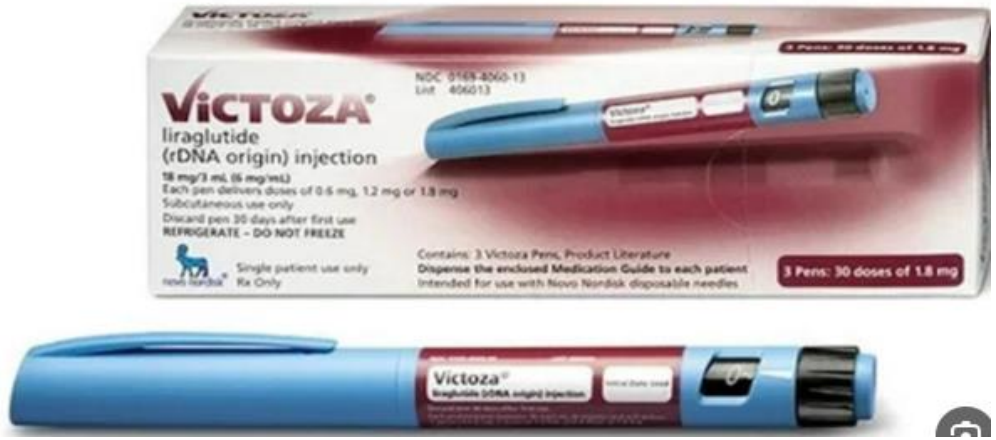
Choice of agent:

- Liraglutide
- Semaglutide
- Orlistat
- phentermine-topiramate
- bupropion-naltrexone
- Phentermine
- Benzphetamine
- phendimetrazine
- diethylpropion

GLP-1 receptor agonists:

- Two GLP-1 receptor agonists have been approved for the treatment of obesity in the United States: semaglutide and liraglutide, both administered by subcutaneous injection. For patients with or without diabetes mellitus, we suggest these agents as the preferred “first-line pharmacotherapy for the treatment of obesity. For patients with diabetes in particular, the side effects, need for injections, and expense are balanced by improved glycemia and weight loss.
- We prefer treatment with semaglutide rather than liraglutide; administration of semaglutide is once weekly rather than once daily, and semaglutide has greater efficacy for weight loss than liraglutide.

What do we have in Iran:



How to prescribe :

- Liraglutide is a chemically modified version of human GLP-1. It is available in the United States and Europe in a higher dose (3 mg daily) than used in diabetes for the treatment of obesity in adults with body mass index (BMI) ≥30 kg/m2 or ≥27 kg/m2 with at least one weight-related morbidity (eg, hypertension, type 2 diabetes, dyslipidemia).

How to prescribe :

For patients considered overweight or with obesity, we treat with liraglutide at the maximum dose (3 mg daily) to achieve maximum weight loss.

For patients unable to tolerate this dose, lower doses can be used as long as ≥4 percent weight loss is achieved by 16 weeks.

In patients who also have type 2 diabetes, glycemic control as well as weight loss should be monitored.

Dosage:

- Liraglutide is administered subcutaneously in the abdomen, thigh, or upper arm once daily.

- The initial dose is 0.6 mg daily for one week. The dose is increased at weekly intervals (1.2, 1.8, 2.4, 3 mg) to the recommended dose of 3 mg.
- We consider a slower-dose titration if liraglutide is poorly tolerated (eg nausea, vomiting). In addition, we will continue a patient on the maximum tolerated dose (if less than the goal of 3 mg) if goal weight loss is achieved on that dose. Data demonstrating long-term (>3-year) benefits with regard to sustained weight loss are scant.

Contraindication:

- Liraglutide is contraindicated during pregnancy and in patients with a personal history of pancreatitis, or a personal or family history of medullary thyroid cancer or multiple endocrine neoplasia 2A or 2B.

- In addition, for patients taking liraglutide concurrent with insulin or an insulin secretagogue (eg, a sulfonylurea), blood glucose should be monitored, and a dose reduction in the insulin or the sulfonylurea may be necessary to avoid hypoglycemia.

Advantages:

- significant reduction in weight

- reduce major cardiovascular disease events in adults with type 2 diabetes and preexisting cardiovascular disease

Disadvantages:

- Gastrointestinal side effects, including nausea and vomiting, are common.
- Other side effects include diarrhea, low blood sugar, and anorexia.
- Serious but less common side effects include pancreatitis, gallbladder disease, and renal impairment.

سطوح پیشگیری

Primordial Prevention

Primary Prevention

Secondary Prevention

Tertiary Prevention

Quaternary Prevention

Primordial Prevention

۱- آموزش صحیح به پزشکان و مراقبین سلامت جهت برخورد صحیح با چاقی

۲- آموزش های لازم در سطح جامعه در مورد اهمیت پیشگیری از چاقی

Primary Prevention

۱- ارائه برنامه‌های آموزشی به مردم جامعه به ویژه گروه‌های خاص مانند کودکان و نوجوانان، خانم‌های باردار و شیرده و سالمندان

Secondary Prevention

۱- درخواست آزمایشات و بررسی علل چاقی برای پیشگیری از ایجاد عوارض احتمالی

Tertiary Prevention

۱- ارائه درمان‌های فارماکولوژیک و غیرفارماکولوژیک به بیماران
۲- ارجاع به مراکز مجهزتر جهت پیگیری های مناسب

Quaternary Prevention

۱- عدم انجام اقدامات تشخیصی و درمانی اضافی