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Case Report

Atypical presentation of Anorexia nervosa

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Abstract

Anorexia Nervosa is a eating disorder characterised by immoderate restriction, inappropriate eating habits, or obsession with having rituals or thin figure and an irrelevant of weight gain. Its prevalence is about 10:1 in female: male ratio. Anorexia nervosa is of 2 types. (1) Restrictive type-individuals restricting food intake, fasting, diet pills and/or exercise for losing weight.(2)Bing eating/purging:-individuals utilizes binge eating or displays purging behaviour as a mean for losing weight. Anorexia nervosa diagnosed on the basis of DSM-5 criteria. Anorexia nervosa presented as medical problems. We have a 19 year old male patient presented with medical problems later diagnosed as anorexia nervosa.

Keywords: Anorexia nervosa, binge eating, DSM-5 criteria

1. Introduction

Anorexia nervosa is characterised by disturbances of eating behaviour. It has refusal to maintain a minimally normal body weight. Young women are commonly involved who become overly concerned with body shape and weight and are underweight.

Its binge eating disorder characterised by repeated episodes of binge eating and self induced vomiting. Aetiology is unknown but combinations of psychological biological and cultural risk factors are involved. Sexual or physical abuse mood disturbances are in anorexia nervosa. Numerous physiologic disturbances in variety of neurotransmitter systems causing neurochemical, metabolic and hormonal changes may play role in development anorexia nervosa.

C/f anorexia nervosa typically begins in mid to late adolescence early puberty stressful life event may be associated. Despite being underweight patients with anorexia nervosa are irrationally afraid of weight gain and have distortion of body image. They are binge eating and socially withdrawn and engaged busy in work or study and exercise.

Physical- they complain of cold intolerance constipation. They have bradycardia, hypotension and mild hypothermia.
Self downy hair growth (lanugo) present.
Salivary gland enlargement so face appears surprisingly full in contrast to generalised wasting.
Lab abnormalities- mild normochronic normocytic anaemia.
Dehydration may cause raised BUN and serum creatinine.
Elevated liver enzymes. Bsl often low.
Hypokalemia, hyponitremia is common.
Endocrine abnormalities-low oestrogen and testosterone Low LH and FSH, Low thyroxine, Normal TSH, CORTOSOL increases.
CVS- reduces cardiac output,bradycardia, non specific ST-T changes.
Prolonged QT may develop into arrhythmias
Diagnosis- American psychiatric association DSM-5 criteria.

2. Case report

A 19 year old male patient came to the OPD with H/O vomiting, Excessive eating for last 3years. Now patient p/w swelling all over the body, generalised weakness breathlessness and constipation for last 6 months.

HOPI – Pt was apparently alright 3 years back when he c/o increased appetite and over-eating which was followed by abdominal discomfort and feeling of overweight.To seek relief he induced vomiting by inserting fingers in his mouth and assumption that by doing this losing the weight. He had h/o staying away from home and family for education before the onset of symptoms.
H/O Edema H/O weight loss (~20kg) H/O Constipation since last 6months.
H/O suicidal attempt 1 year back H/O psychiatric treatment.
No H/O fever/abdominal pain/distension/blood in stools
No H/O fatty stools/lactose intolerance
No H/O addictions No H/O DM/HTN/TB
Family history-NAD
G/E-cachexic;P-54/min reg;BP -90/60mmHg.
Wt-40kg Ht-170cm BMI-13.84kg/cm2.
Edema + Pallor++
Pt had brittle hair,lanugo hair and salivary gland enlargemegment
S/E- NAD

2.1 Investigations

Table 1: Investigation

Parameter	Level	Reference level
HB	**8.4g/dl**	13.5g/dl-18.0g/dl
WBC	**3500**/cumm	4000/cumm-11000/cumm
Polymorphs	56%	40-75
Lymphocytes	42%	20-40
Eosinophil	01%	1%-6%
Monocytes	01%	2%-10%
Basophil	0%	0-1
Platelets	2,19,000/cumm	1,50,000/Cumm-4,50,000
MCV	84.3	76-96
MCH	28.0	27-32
RBC Count	3.00Nill/cumm	3.5-5.5
BSL (R)	**70mg/dl**	90-110mg/dl
LFT		
SGOT	34 IU/L	51 IU/L -40 IU/L
SGPT	22 IU/L	51 IU/L-40 IU/L
Alkaline Phosphatase	99 U/L	70u/L-306 U/L
Sr.Bilirubine(Total)	0.5 mg/dl	0.2mg/dl-1.2mg/dl
Sr.Bilirubine(Direct)	0.3 mg/dl	0.1mg/dl-0.5mg/dl
Sr.Bilirubine(Indirect)	0.20 mg/dl	0.3mg/dl-0.5mg/dl
Sr.protein(total)	4.0 gm%	6.2gm%-8.0%
Albumin	2.2 gm%	3.5%-5.5gm%
Globulin	1.80 gm%	1.3%-3.2%
RFT		
Blood Urea	17mg/dl	10mg/dl-45mg/dl
Sr.cratinine	1.0mg/dl	0.6-1.2mg/dl
Urine Routine	Normal	
Sr.Amylase	61	25-125 IU/L
Serology		
HIV	Negative	
HBsAg	Negative	
Stool	No parasite ,RBC-absent	
Eletrolytes-		
Sr.sodium	135	130mEq/L-145mEq/L
Sr.potassium	**3.0**	3.5-5.5
T3T4TSH-		
T3	**0.3**	0.69-2.15ng/ml
T4	105	52-127ng/ml
TSH	2.6	0.3-45U/ml
Retic Count	1%	0.2%-2.0%
Sr.phosphorus	3.2	2.5-5.5mg/dl
Free T3	2.19	2.3-4.2pg/dl
24hour urine protein	**1.6gm/24hour**	Upto 1 gm/hour
Serum cortisol 8am	**22.3ug/dl**	6.2-19.4ug/dl
Serum cortisol 4pm	**20.94ug/dl**	2.3-11.9ug/dl
Serum testosterone	**33.6ng/dl**	241-827ng/dl
Folic acid	>24ng/ml	>5.38ng/ml
Serum calcium	8.05mg/dl	8.8-10.6mg/dl
Vit B12	>2000pg/ml	211-911pg/ml
25-OH VIT. D	45.79ng/ml	30-100ng/ml
Serum ADA	15IU/L	>43IU/L

Peripheral Blood Smear-Hypho+to+Macro+Aniso+ USG Abdomen and Pelvis –
(1) Mild Hepatomegaly with Splenomegaly with moderate Ascities.
(2) Renal parenchymal disease.
Upper GIscopy- normal
CT HEAD –PLAIN - Normal

2.2 Diagnosis

Based on pts presentation and workup, a diagnosis of Anorexia Nervosa was suspected which was further confirmed after Pschytric opinion.

2.3 Management

Symptomatic; Correction of Anemia and Hypoalbuminemia; Vitamin Supplements. Pyschocounselling (vital), Anti-Depressants.
Pt started to gain weight with reduced symptoms, comes regularly for followup.

3. Discussion

Anorexia nervosa is a voluntary restriction of food intake relative to caloric requirement leading to an inappropriate low body weight.
Anorexia nervosa is of 2 types. (1)Restrictive type-individuals restricting food intake, fasting, diet pills and/or exercise for losing weight.(2)BING eating/purging:-individuals utilizes bing eating or displays purging behaviour as a mean for losing weight.

Table 2: Characteristics

Parameter	Characteristics
Onset	Mild-adolscence
Female:male	10:1
Lifetime prevalence	1%women
Weight	Markedly decreased
Menstruation	Absent
Bing eating	25-50%
Mortality	0.5% per decade
Skin extremities	Lanugo,acrocyanosis,edema
Cardiovascular	Bradycardia, hypotension
GIT	Salivary gland enlargement, slow gastric emptying, constipation, elevated liver enzymes
Haematopoietic	Normochromic,normocytic anemia, leucopenia
Fluid/electrolyte	Increased BUN, creatinine, Hypokalemia,hypoglycemiae,hypophosphatemia, hypomagnesemia
Endocrine	Hypoglycemia, low oestrogen/testosterone,low LH/FSH, low normal thyroxine, normal TSH, increased crtisol

Anorexia nervosa is diagnosed by DSM 5 criteria-

Persistent restriction of energy intake leading to significantly low body weight (in context of what is minimally expected for age, sex, developmental trajectory and physical health

Either and intense fear of gaining weight or of becoming fat or persistent behaviour that interferes with weight (even though significantly low in weight)

Disturbance in the way once body weight or shape is experienced, undue influence of body shape and weight on self evaluation or persistent lack of recognisation of seriousness of current low body weight

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Levels of severity

Body mass index is used as indicator for level of severity for anorexia nervosa
Mild –BMI of 17-17.99
Moderate- BMI of 16-16.99
Severe- BMI of 15-15.99
Extreme –BMI of less than 15

Our patient a 19 year old male patient presented with medical problems diagnosed as anorexia nervosa which is confirmed by psychiatry opinion and treated with medical treatment and with counselling. Our patient having hypotension, bradycardia, lanugo, salivary gland enlargement, oedema, hypoglycaemia, hypocalemia, anaemia, increased cortisol level, low testosterone level, constipation, and BMI-13.84kg/mg^2, also having suicidal tendency, binge eating, body image distortion. with the help of psychiatry department we treated patient with medical and behavioural therapy.

4. Conclusion

Patient with anorexia may present with multiple medical complaints and it is imperative that the physician be familiar with the syndrome so as to correctly identify and treat patient with this disease. By properly diagnosing and treating the disease we should reduce the mortality and morbidity.

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