Diagnosis and Treatment of Adolescents with Eating Disorders

American Society for Adolescent Psychiatry

March 14, 2009

New York, NY

Katherine A. Halmi, MD

Professor of Psychiatry

Weill Cornell Medical College

Eating Disorders

Risk Factors

A. *Familial*

1. A family member or relative with anorexia nervosa, bulimia nervosa or obesity
2. A family member of relative with depression or alcohol/drug abuse/dependence

B. *Individual biological factors*

1. Mildly overweight
2. Early menarche

Eating Disorders

Risk Factors

C. *Individual psychological factors*

1. Perfectionistic-obsessional personality at risk for AN
2. Low self esteem and sense of ineffectiveness, lack of confidence for AN and BN
3. Affective disorders (depression), alcohol and drug abuse

D. *Individual behaviors*

1. Dieting
2. Involvement in activities or professions that emphasize weight control—gymnastics, ballet, wrestling, jockeys, actors and models
3. Early feeding problems

Eating Disorders

Risk Factors

E. Cultural

1. Living in an industrialized country
2. Emphasis on thinness as beauty
3. General significant weight increase in general populations in the US over the past 40 years

F. Stressful life events

1. Death of a close relative or friend
2. Sexual abuse

Developmental Features in Anorexia Nervosa

- Lack of experiences to foster personal independence
- Sense of personal ineffectiveness
- Social ineffectiveness
- Poor self-esteem

Wagner *et al.*, *Int. J. Eating Disorders. 6*:495-505 1987

Multi-Conditional Model of Pathogenesis of Anorexia Nervosa and Bulimia Nervosa

Biologic Vulnerability

Genetic, physiologic predisposition

Psychologic Predisposition

Early experience
Family influences
Intrapsychic conflict

Personality Change

Social Climate

Societal influence and expectations

Dieting

Starvation Effects

Weight Loss

Malnutrition

Bulimia

Mental Changes

Physiologic Changes

Sustaining

(modified from Pike and Ploog, 1984, adopted from Lucas, 1991)

Core Eating Disorder Psychopathology

- Weight – significant weight loss or weight fluctuations.
- Eating Behavior – gradual more restrictive dieting, refusal to eat with family, binge eating.
- Purging – self induced vomiting, laxative abuse, diuretic abuse, enemas.
- Activity – excessive jogging, biking, aerobic exercising, general over activity, pacing, never sits.

Core Eating Disorder Psychopathology Preoccupations and Rituals

- Body image – fear of fat, mirror gazing, frequent weighing.
- Food – calorie counting, concern over far content, collecting recipes and increased interest in cooking and baking.
- Eating – peculiar rituals, fear of being unable to stop eating

CLINICAL FEATURES
Psychological

1. Anorexia Nervosa – obsessional, self-doubting, insecure, feeling of ineffectiveness, perfectionistic, dependency, immaturity, depression, social isolation, decreased mental concentration, preoccupation with thoughts of food, need to control.

2. Similarity to Starvation – common symptoms: depression, preoccupation with thoughts of food, irritability, obsessional behavior, anxiety.

3. Bulimia Nervosa – low self-esteem, disturbed family relationships, depression, poor impulse control, impaired social skills, disturbed inter-personal relationships, dependency.

Psychiatric Comorbidity of 105 Eating Disorder Patients

Lifetime Affective Disorders – 63%

Lifetime Anxiety Disorders – 37%

Alcohol or Substance Abuse – 37%

AN-R	12%
BN	52%

Psychiatric Comorbidity of 105 Eating Disorder Patients

Personality Disorders – 68%

Cluster B – Impulsive

AN-R – 0%

Bulimic subgroups – 31%

Cluster C – Anxious – 30%

CLINICAL FEATURES
Medical

1. Similarity to Starvation

   Common features: mild peripheral cyanosis, cold skin, peripheral edema, aged appearance, diminished stretch reflexes, scalp loss.

2. Blood Chemistry Abnormalities

   Anorexia Nervosa – leucopenia, bone marrow hypoplasia, hyper or hyponatremia, hypokalemic alkalosis, elevated alkaline-ptase, elevated amylase, low fasting glucose.

CLINICAL FEATURES
Medical

3. Endocrine Abnormalities

Anorexia Nervosa – amenorrhea, decreased serum FSH, LH and decreased FSH, LH responses to GNRH, low estrogen; increased CRH secretion, increased cortisol production; low-normal levels of TSH. CRH and cortisol secretion and thyroid indices return to normal with weight restoration.

Bulimia Nervosa – there is no characteristic endocrine profile.

CLINICAL FEATURES
Medical

Satiety peptides: cholecystokinin-fasting levels are normal in normal weight bulimics, after eating the total CCK secretion over several hours is significantly lower compared with controls. Fasting levels of CCK in anorectics are elevated.

Neuropeptides –

- Leptin – decreased in AN returns to normal levels with weight gain.
- Ghrelin – elevated in AN decreases with weight gain.

CLINICAL FEATURES
Medical

4. Other Characteristics

Bulimia Nervosa – tooth erosion, poor gum hygiene, swollen parotid glands, Russell sign-abrasion and scars on dorsum of hand, substance abuse-stimulant drugs for weight control; amphetamines, caffeine, nicotine. Drugs for anxiety reduction, alcohol and cocaine, cardiac arrhythmia.

Anorexia Nervosa - osteoporosis

Reviews of New Treatment Research in Eating Disorders With Critical Analyses

1. Cochrane Reviews – The Cochrane Library, Issue 3, 2004.
2. Australian and New Zealand Clinical Practice Guidelines for Treatment of AN, Australian and New Zealand J. Psychiatry 2004; 38:659-670.
3. NICE (National Institute for Clinical Excellence) Clinical Guideline 9, January 2004, Eating Disorders, UK www.nice.org.uk/CG009publicinfoenglish

Practice Guidelines for the Treatment of Patients with Eating Disorders, Third Edition Suppl to American J. Psychiatry, V 163, N7, July, 2006

Summary of Treatment Reviews and Guidelines

1. Outpatient – psychological treatment given by an experienced and competent service that assesses physical risks.
2. Inpatient treatment – an experienced setting to implement refeeding with careful physical monitoring and psychosocial intervention.
3. Family intervention that directly addresses the eating disorder should be given to children and adolescents.

Summary of Treatment Reviews and Guidelines

4. Dieting advice with close attention to medical manifestations and weight restoration.
5. Antidepressant and antipsychotic medications may be used for depression and overwhelming anxiety and hyperactivity.

Family Therapy
Randomized Controlled Trials

1. Maudsley – those under age 19 did significantly better with family therapy compared to individual therapy both at end of treatment and at 5 year follow-up.

Eisler et al., 2000. J Child Psychol & Psychiatry

Family Therapy in Anorexia Nervosa

Source	Treatment	Outcome
Eisler et al. Child Psych 41:727, 2003	Conjoint Family Therapy 19 Separated Family Therapy 21 Adolescent Outpatients	Both treatments produced substantial improvement
Lock et al. J Am Acad., Child Adol Psych 45:666, 2006	Short term family 10 Long term family 20	No difference in outcome. Severe OCD features or non-intact families may require long term treatment

Family Therapy for Adolescent Bulimia Nervosa

Source	Treatment	Outcome
Le Grange et al Arch Gen Psych 2007; 64:1049 Schmidt et al. Am J Psych 2007; 164:591	Family based treatment 41 Supportive therapy – 39 Family therapy 41 CBT guided self-care 13 sessions	FBT 39% B/P abst. SPT 18% B/P abst. FBT superior to SPT on all measures port treatment and 6 mo. FU No difference at 12 months.

Family Dynamics

- Parents – eating problems, preoccupied with child's weight and appearance
- Insecure child attachment
- Parental criticism
- Parental intrusiveness and over control
- Low family cohesion

Impact of Eating Disorder on Family Members

- Child's vulnerabilities – starvation, death
- Controlling and authoritarian parenting
- Marital conflict
- Abuse or disengagement

Family Assessment

- Parental Psychopathology
- Family and Marital Conflict
- Coercive Parenting
- Persistent Negative Affect

Maudsley Behavior Family Therapy

- Minuchin – alter family functioning – family meal
- Selvini Palazzoli – strategic approach – views family positively – therapist consultative
- Narrative family therapy – separation of patient from the illness - externalization

Behavior Family Therapy

Stage 1

- ➢- United parental action toward refeeding
- ➢- Absolve parents from causing the illness
- ➢- Align patient with siblings

Stage 2

- ➢- Weight gain is evident
- ➢- Attention to interpersonal family issues that affect a steady weight gain

Stage 3

- ➢- Address adolescent autonomy and family boundaries

Behavior Family Therapy

- Shown to be effective in 3 randomized trials.
- Parents with high expressed emotion or criticism will do better with their anorectic adolescent in separated rather than whole family therapy.
- Short term, 10 sessions over 6 months is effective for intact families and patients low in obsessive-compulsive features.

Systems Family Therapy

- Focused on patterns of behavior and beliefs that have developed in the family
- Studies family members' roles and relationships
- Examines how patient's developmental stage is accommodated in the family

Systems Family Therapy

Stage 1

- Explain therapeutic approach
- Gather family functioning information
- Establish goals

Stage 2

- Explore individual and parental beliefs
- Work towards changing erroneous beliefs

Stage 3

- Develop family understanding
- Enhancing mastery and new explanations

Systems Family Therapy

- No randomized trials
- Case series suggest good outcome

Family Therapy for Bulimia Nervosa

- Superior to individual therapy for adolescents
- Emphasis on regulating eating and curtailing purging
- Acknowledgement of secretiveness, guilt and shame
- Challenges of co-morbid illnesses

Grange et al, 2007

Pharmacotherapy of Anorexia Nervosa

Medications are only useful adjuncts in treating AN

1. Cyproheptadine (Periactin) facilitates weight gain in AN-restrictors and has an antidepressant effect.
2. Major tranquilizers - chlorpromazine, olanzapine may reduce severely obsessional, compulsive and agitated behavior, side effect - weight gain.
3. Fluoxetine (and other SSRI’s) may reduce relapse of weight and eating disorder behaviors.

Medication Management of Bulimia Patients

1. Fluoxetine, 60mg/d is the drug of first choice—evidence of beneficial effect, favorable side-effect profile relatively
2. If first trial is unsuccessful, there is evidence another antidepressant trial may be effective
3. Minimum duration of successful treatment should be 6 months
4. Baseline lab—CBC, serum electrolytes, liver function, BUN/Cr, thyroid function, EEG