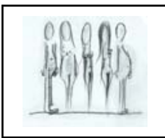

Inpatient Management Of Adult Eating Disorders: Areas To Consider

GENERAL

Aims of admission should be to restore medical stability, to address nutritional components of the eating disorder, and to gradually introduce a psychological component to treatment involving parents and carers as far as possible or appropriate. It is important to try to engage the patient in working with the team in achieving nutritional rehabilitation and containing weight losing behaviours. It is important to be aware of reactions to weight restoration, including medical problems (eg Refeeding Syndrome) and psychological reactions (eg fears and anxiety, secretiveness and depression). The process is often slow and has ups and down. The team should meet regularly to discuss progress and to all be on the same page in applying the program consistently. Staff education may be necessary (see bottom).

ADMISSION CRITERIA (adapted from APA guidelines 2000)

High Risk of death from suicide or physical effects:- Physical state - adults: heart rate (HR) <40 min, blood pressure (BP) <90/60mm, potassium <3, other electrolyte imbalance, temp <36°C and/or body mass index (weight kg/height m2) <14; children: HR <50 min, orthostatic changes: <20/min increase, HR >20mm drop in BP, BP <80/50mm, low potassium, low phosphate and/or rapid weight loss

Mental state - an active plan for suicide; continuous preoccupation with eating disorder cognitions; co-operative only in highly structured treatment; presence of another psychiatric disorder requiring hospitalisation

Eating Disorder symptoms – needing supervision of every meal and/or naso-gastric feeding; needing modification of extreme purging and/or exercise behaviours; severe family problems and/or requires residential placement to access treatment.

Disclaimer: These are not exclusive of other indications which may arise

ASSESS, MONITOR AND MANAGE MEDICAL RISK (PSYCHIATRIST/REGISTRAR/RMO)

1. Assess Medical Risk
   - Patients at BMIs of less than 14 are generally considered to be at high medical risk but this can be the case in a patient of higher BMI **if weight has been lost very rapidly.**
   - Be aware of Refeeding syndrome, it is a **rare** iatrogenic response to oral or nasogastric nutritional rehabilitation (or can be a response to intravenous glucose infusion to correct hypoglycaemia). Can be prevented by a gradual re-introduction of calories. Symptoms include delirium, chest pain and heart failure often but not always in association with hypophosphatemia. It is more likely in patients with BMI's<14. Indicators of risk are heart rate<40 beats per minute, systolic BP < 80mmHg, 10-20 mm Hg fall in BP on standing and 10-20 beats per minute rise in heart rate on standing, ketosis and dehydration, prolonged QTc, hypokalemic alkalosis (usually associated with purging behaviours), hypothermia (may be associated with an ECG which resembles anterior myocardial infarction). Such patients require frequent clinical observations, daily bloods, frequent ECGs and possibly cardiac monitoring and transfer to CCU (if syncope occurs this should definitely be undertaken).
2. Make tentative eating disorder diagnosis based on history, physical examination and investigations, collaborative history, clinic assessment, team input, eg
   - Anorexia Nervosa (BMI17.5 or less),
   - Bulimia Nervosa (normal body weight bingeing & purging at least 2/week for >3months), Eating Disorder Not Otherwise Specified (EDNOS) where criteria for Anorexia Nervosa and Bulimia Nervosa are not met despite psychological and behavioural features of an eating disorder associated with physiological or medical disorders secondary to the eating disorder.
3. Investigations:
   - On admission and at least weekly - more often if abnormal & replacement necessary (eg of potassium) FBC, ESR, electrolytes, urea, creatinine, BSL, TFTs, LFTS, proteins, calcium, phosphate, magnesium, ECG (QTc interval), urine/serum osmolalities. Fe studies, Vitamins D, B12, folate, oestradiol levels. Screen for polycystic ovarian syndrome (PCOS) as clinically indicated. In/out fluid balance may be necessary if serum osmolality abnormal, & bone marrow biopsy if severe anemia or pancytopenia .
   - Common abnormalities include low white cell count, hypokalemic alkalosis, low blood sugar level, mildly raised liver transaminases, low TSH with slight reduction of T4 and T3. Creatinine whilst in the normal range, may be higher than expected indication reduced GFR.
   - Plain Xrays of chest and abdomen if clinically indicated; eg suspected acute respiratory problem (eg pneumonia, lung abscess),acute abdomen (e.g. acute gastric dilatation). Similarly plain Xrays if fracture or osteomyelitis suspected.
   - Bone density should be estimated yearly by DEXA or more often if symptomatic. Nuclear bone scans should be performed if osteomalacia is suspected (bone pain, low calcium) Referral should be made to specialist endocrinology service for osteoporosis or osteomalacia.
   - More sophisticated cardiac investigations eg Holter monitoring, echocardiogram etc, EEGs, neuroimaging eg MRI or CT (high radiation), GIT investigations eg coeliac disease screening and immunology, small bowel series ,transit studies, colonoscopy, manometry, pelvic floor studies if clinically indicated and usually following appropriate consultation with specialist services.
4. Assess mental state and changes in this ie organic brain syndrome, core symptoms of eating disorder, quasipsychotic and psychotic symptoms, anxiety, depression, self-harm, comorbid psychiatric disorders including substance abuse and deliberate self harm.
5. Assess and review need for compulsory treatment (Mental Health Act, Guardianship Order). Implement if necessary.
6. Identify psychosocial stressors, triggers, precipitants and management strategies for these.
7. Involve carers/family support persons as appropriate
8. Coordinate (recruit if necessary) multidisciplinary team, conduct regular ward rounds and support other team members in working with highly difficult divisive patients
9. Work in a supportive or active psychotherapeutic mode in concert with other health professionals in the team.
10. Consider novel antipsychotics for aggressive or obsessive symptoms.
11. Discharge planning: outpatient appointments at ED clinic (if available) or in community, GP liaison, community mental health team if indicated, private psychiatrist, psychologist, psychotherapist.

DIETETICS

Refer to a Clinical Dietitian to provide nutrition assessment, to establish a nutrition management plan and provide education about nutrition, weight gain, weight maintenance, the resumption of normal eating and the nutritional methods to prevent or treat the refeeding syndrome.

Nutritional assessment to include weight history,current and past food and fluid intake, Activity pattern, Anthropometry, Biochemical data, medical problems relating to malnutrition, **to assess risk of Refeeding Syndrome(RFS)**, **prophylactic supplementation of vitamins and minerals if at risk of RFS**

Nutrition Management Plan:

Meal Plan to establish regular meals and snacks, preferably with a balanced and varied oral diet. Avoid high carbohydrate intake. Preferably an appropriately balanced oral diet, (eg 50% of energy from carbohydrates, 20% from protein and 30% from fat.

Use of oral polymeric nutritional supplement drinks as meal replacement if insufficient food eaten at meal/snack times in exchange., (Fortisip, Ensure, Ensure Plus)

Consider nasogastric feeding(continuous or bolus) as a last resort (using enteral feeds such as Osmolite, FibersourceHN, or Twocal HN if higher energy content and smaller volume required eg for severe vomiters).

- Monitor nutritional markers and progress with food/fluid records, weight changes and make further adjustments to meal plan by increasing energy intake gradually to achieve regular weight gain.
- Provide nutrition education & counselling sessions to address abnormal eating behaviours, normalising of eating and weight restoration.

References:

1.Dietetic Practice Guidelines for Management of Anorexia Nervosa in Adults, May 2006 Dietetic Association of Australia.

2. RPAH Dept Nutrition & Dietetics Nutrition Policy on Refeeding Syndrome, Dec 2006

NURSING

Developing a trusting relationship and communicating with the patient in a non-threatening, non-judgemental manner are the most important components of nursing patients with eating disorders. Understanding that challenging behaviours are part of the illness is vital and attempting to work with the patient against the illness is the pathway to clinical success.

Talk with the patient each day, largely to listen as they discuss their anxiety around food, weight gain. Patients will be especially anxious around and after meal times. Supervise and offer support at mealtimes. Preferably eat normally together with patients and try to defuse anxiety by facilitating conversation and a relaxed and pleasant atmosphere.

Be aware of and develop plans to counteract challenging behaviours, e.g. vomiting (excoriated knuckles, teeth/breath abnormalities), emotional manipulation (arguing, splitting staff, bargaining), salt loading, tampering with NGT feeds (e.g. syphoning, disconnecting), excessive exercise (e.g. bruised iliac crest or back) and falsifying weights (secreting weights in bra, undies, water loading prior to weighs)

Meal Management

- Supervision and support with eating is a key component of inpatient treatment
- Aim to reduce activity and limit opportunities for purging after meals: Bedrest or supervised relaxation time for 1 hour after meals. No access to bathrooms 1 hour after meals. Patients need to go to the toilet before eating.
- Long-term aim to normalise eating to 3 meals and 3 snacks a day - Breakfast, morning, lunch, afternoon, dinner and supper, with gradual introduction of feared foods
- If patient is within healthy range, aim to reduce restriction, binging and purging incrementally each week.

Weighing: Regular weighing in the morning in a gown and bare feet after elimination and before consumption of food or liquids. e.g. 2-3 times per week

Leave: Gradual introduction of weekend leave if the patient can gain weight in hospital and maintain weight while on leave. Involve family/partner in planning leave

SOCIAL WORKER/FAMILY WORKER

Meeting with families and carers. Where appropriate provide family therapy, individual psychotherapy, home visits, liaise with other organizations, organising social service benefits, care packages and accommodation.

OCCUPATIONAL THERAPY

- Assess and engage in Living Skills retraining such as budgeting, self care, stress management, time management, mindfulness and relaxation.
- Help improve and challenge maladaptive behaviours around food preparation and food shopping in a group environment.
- Engage clients in goal setting in regard to purposeful activities such as work, education, leisure & sleep.
- Educate regarding appropriate levels and types of exercise.
- Home visits where appropriate.
- Can conduct sessions in a group setting as well.

PSYCHOLOGY

Ideally all patients should be assessed and seen by a psychologist for the duration of the admission:

- To conduct therapy as appropriate addressing ED symptoms &/or reaction to weight restoration
- To advise on an eating/activity behavioural management program
- To engage patients in cognitive behavioural and interpersonal psychotherapy techniques as appropriate
- To address co-morbid conditions

SPECIALIST TEAM CONTACTS: The RPA Eating Disorder team is available for telemedicine (ph: 9515-5843), or individually:

Psychiatrists: Prof. Janice Russell or ED registrar (95158128)

Dietitian: Elizabeth Frig (9515 5045)

Clin. psychologist: Narelle Spinks (9515 5864)

Social Worker Diana Priest (9515 5871)

Occupational Therapist : Call 9515 6111 and page Missenden Unit OT

Statewide Eating Disorder Coordinators: Sarah Maguire and Jeremy Freeman 9515 5843 or Roberta (admin) 9515 6040

OTHER RESOURCES

CEDD (from NSW Health) offers support and education for Eating Disorder health services providers. Phone 9515 5843, email office@cedd.org.au or check www.cedd.org.au, where there is further information on treatment guidelines as well as for referral options ("Statewide Eating Disorder Resource List").

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