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Clinical Appraisal Topic (CAT)  
NURS 568-Common Health Problems of the Maturing Adult  
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**Clinical Scenario:**

19 year old female with a 6 year history of anorexia nervosa. Patient has been through treatment at several out of state treatment facilities. She has increased her weight by 17 pounds. Patient and mother admit to her being depressed, although she refuses to take an antidepressant.

**Clinical Question:**

In adolescent female diagnosed with anorexia, are antidepressants compared to standard treatments effective in improving weight gain?

**Articles:**

Claudino, A. M., Silva de Lima, M., Hay, P., Bacaltchuk, J., Schmidt, U. & Treasure, J. (2006).

Antidepressants for anorexia nervosa. Cochrane Database of Systematic Reviews 2006, Issue 1. Art. No.: CD004365. DOI: 10.1002/14651858.CD004365.pub2.

Rossi, G., Balottin, U., Rossi, M., Chiappedi, M., Fazzi, E. & Lanzi, G. (2008). Pharmacological

treatment of anorexia nervosa: a retrospective study in preadolescents and adolescents. In *Clinical Pediatrics* 46(9) pp. 806-811.

**Critical Review of Study/Summary of Key Evidence**

Claudino et al. (2006) completed a systematic review on the use of antidepressants for anorexia nervosa, providing Grade B recommendation with level of evidence I. Rossi et al. (2008) performed a retrospective naturalistic study of preadolescent and adolescents receiving treatment for anorexia nervosa at a specialty psychiatry unit with level of evidence III with a recommendation Grade B.

In the Claudino et al. review, randomized controlled trials of antidepressant treatment for anorexia nervosa patients, as defined by the DSM-IV or similar international criteria, were selected for review. Interventions included in the study were randomized controlled studies lasting at least four weeks and comparing any antidepressant drug to a placebo or another antidepressant drug. A total of 1303 citations, including papers and abstracts, on

antidepressants for patients with anorexia nervosa or eating disorders were identified from the searches. Ultimately, only 40 studies were fully examined and only 7 trials fulfilled the inclusion criteria and 33 studies were excluded. Of the 7 studies included in the review, four of them compared antidepressant to placebo and three compared antidepressant drugs. All studies were described as randomized and five of the studies received a grade B and two received grade A recommendations.

Rossi et al. performed a naturalistic study of anorexic preadolescent and adolescents referred to a specialist psychiatry unit. The goal of the study was to examine the options and evaluate the efficacy and safety of pharmacotherapy in the treatment of anorexia nervosa in preadolescents and adolescents. The medical records of all newly diagnosed preadolescents and adolescents to a specialty psychiatric unit were retrospectively reviewed. The effectiveness of the pharmacological treatment was assessed using the Clinical Global Impression Scale (CGI). Medical records of 90 preadolescents and adolescents were reviewed: 17 subjects were excluded because of a diagnosis that was not anorexia nervosa. 74 patients had the diagnosis of anorexia nervosa, in accordance with DSM-IV guidelines. Of those 74 patients, 14 were excluded from the study for various reasons, including noncompliance with treatment. 60 patients affected by anorexia nervosa had their clinical and treatment data included in the study. Pharmacotherapy was prescribed for 19 of the patients in the study group. 32% were treated with a single medication, 16% received 2 or more medications in combination, and 52% were treated with 2 or more drugs consecutively.

The main goal of treatment in anorexia nervosa is stabilization of medical and nutritional status, improvement of body image and alleviation of pre-occupation with weight and shape. Pharmacotherapy is frequently an adjunctive intervention. Currently, there is little evidence of efficacy and effectiveness of pharmacotherapy in treatment of acute anorexia nervosa. Pharmacotherapy is not recommended as a first-line treatment. The strengths of the Claudino review were that all studies were randomized. The level of evidence was at least a B on all studies included in the review. The weaknesses of the study are the small trial size (only 7 studies included) and large confidence intervals. Meta-analysis of data was not possible for the majority of outcomes. Some of the studies included in the review were dated from the 1990s. No current studies met the inclusion criteria. The opportunity provided by this review was the identification of lack of evidence to support pharmacotherapy in the treatment of anorexia nervosa. The threats to the study were that the patients treated on outpatient basis with antidepressants have not been studied.

The strength of the Rossi study is that it focused on anorexic preadolescent and adolescents. The weaknesses of the study were that this was a nonrandomized study with no control group. There was a small sample size (19), a lack of a control group, open-label use of psychotropic medications, retrospective data collection and simultaneous participation in psychotherapy. The opportunity of the study was an awareness of the lack of controlled studies regarding the use of antidepressants in individuals diagnosed with anorexia nervosa. The threats to the study are the depressive symptoms may be, at least in part, a result of starvation and may improve as the nutritional status of the patient improves.

## Clinical bottom line

Based on the results of both reviews, there is insufficient evidence to support the treatment of acute anorexia nervosa with antidepressants. The Claudino et al conclusions were that there is a lack of quality information regarding the use of antidepressants in acute anorexia. Medications targeting depressive symptoms have been tested in several controlled studies but have not been found to produce significant and consistent improvement in terms of either weight gain or abandonment of the pursuit of thinness. Future studies testing safer and more tolerable antidepressants in larger, well designed trials are needed to provide guidance for clinical practice. The results of the Rossi study were that based on the CGI assessment, almost all the patients receiving pharmacotherapy showed an improvement in their eating behavior and in their psychological status.

Relevance to clinical practice in a family practice setting would be dependent on where they are in the treatment of their disease. Newly diagnosed anorexics would probably not benefit from antidepressant therapy. Pharmacotherapy has not been found to be helpful in treatment of the core symptoms of anorexia nervosa and may not be necessary if symptoms disappear with improved nutrition. Once nutritional status has been restored, and if depressive symptoms persist, antidepressant therapy could be initiated. Currently, there are not any FDA approved medications for the treatment of acute anorexia nervosa.

Pharmacotherapy should not be the sole treatment for individuals diagnosed with anorexia nervosa. Treatment should include nutrition to restore age-appropriate weight, individual or group psychotherapy and pharmacotherapy, in that order. Based on the results of these studies, I would not be inclined to treat my patients with the diagnosis of acute anorexia nervosa with antidepressants.

## References

Centre for Evidence Based Medicine: <http://www.cebm.net/index.aspx?o=1001>

Critical Appraisal Tools: Retrieved from <http://www.unisa.edu.au/cahe/CAHECATS/#15>

Fettters, L., Figueiredo, E.M., Keane-Miller, D., McSweeney, D.J. & Tsao, C. (2004). Critically appraised topics. In *Pediatric Physical Therapy*, 16, 19-21. Retrieved from

[http://vizedhtmlcontent.next.college.com/CurrentCourse/CAT%20article\\_Fettters\\_2004.pdf](http://vizedhtmlcontent.next.college.com/CurrentCourse/CAT%20article_Fettters_2004.pdf)

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