

Evidence-Based Medicine Quiz (EBMQ8)

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In a patient with major depression and multiple sclerosis, is there evidence from the literature that standard treatment of depression with antidepressants is safe and effective?

Answers

1. To answer this question we can search a general medical database available through the Internet, for example PubMedMedline (<http://www.ncbi.nlm.nih.gov/entrez/query.fcgi>).
2. To maximize the relevancy of the results we can search with the specific medical subject headings available to Medline. For depression, Medline uses the term "depressive disorder" and for multiple sclerosis "multiple sclerosis".
3. Because we are interested to answer a question about treatment, we should search for studies that have used a randomized design, as this is considered the gold standard in this area. Therefore we should add to our query the term "randomized controlled trial".

Therefore, our search query will be:

"multiple sclerosis" IMESH AND "depressive disorder" IMESH AND "randomized controlled trial"

4. This search yields 7 papers only! A closer look at the papers reveals that only 2 are relevant to our question, i.e. our search had a specificity of $(2/7 \times 100) = 29\%$. The papers are the following:
 - Mohr DC, Boudewyn AC, Goodkin DE, Bostrom A, Epstein L. Comparative outcomes for individual cognitive-behavior therapy, supportive-expressive group psychotherapy, and sertraline for the treatment of depression in multiple sclerosis. *J Consult Clin Psychol* 2001, 69:942-949.
 - Schiffer RB, Wineman NM. Antidepressant pharmacotherapy of depression associated with multiple sclerosis. *Am J Psychiatry* 1990, 147:1493-1497.

The paper by Mohr et al compared the efficacy of sertraline, cognitive-behavioral psychotherapy or supportive group therapy in 63 patients with depression and multiple sclerosis. They found that the all treatments were associated with reductions in the measures of depression (Beck depression inventory and Hamilton rating scale for depression) and there was a trend for both sertraline and cognitive psychotherapy to be more effective than group therapy, although this was evident only for Beck depression inventory and not for the Hamilton scale.

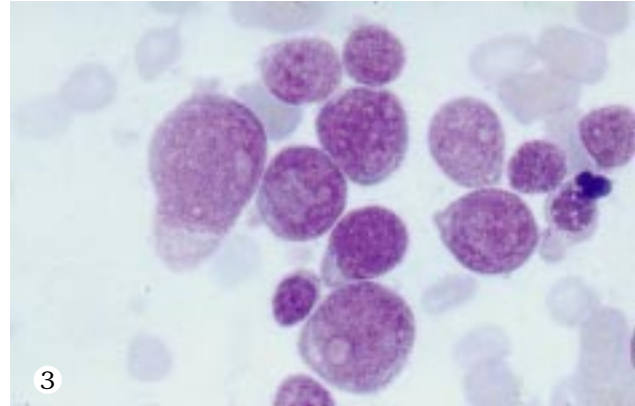
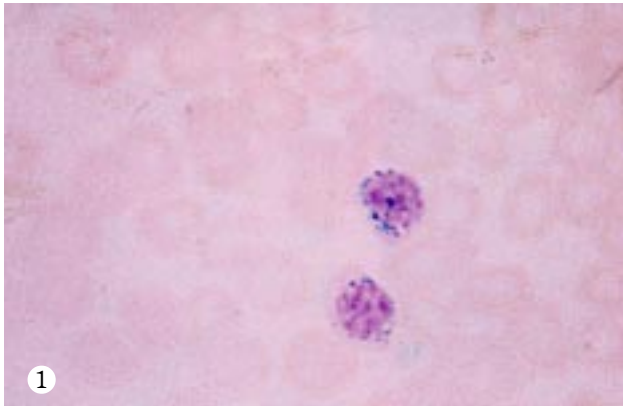
The paper by Schiffer et al compared desipramine plus psychotherapy with placebo plus psychotherapy in 28 patients with multiple sclerosis and found desipramine more effective compared to placebo but side effects of the medication limited the results reported.

5. In summary, there are very few studies on the treatment of depression in patients with multiple sclerosis. On the basis of the existing studies it is difficult to recommend any treatment, although it seems reasonable to conclude that the use of sertraline (and by extrapolation of an SSRI type of antidepressant) might be useful with or without cognitive behavioral psychotherapy.

Hematology Quiz (Case HQ26)

Material source: 1st Department of Internal Medicine, University of Athens, "Laikon" Hospital, Goudi, Athens Greece

Comments: Associate Professor J. Meletis, Dr. E. Terpos, Dr. E. Apostolidou, Dr. M. Tsironi, Dr. M. Samarkos



A 72-year-old male outpatient was evaluated for mild anemia. Bone marrow morphology was diagnostic of MDS; the French-American-British (FAB) type was refractory anemia with ringed sideroblasts (RARS). The administration of erythropoietin with and without G-CSF had no effect to anemia. Two years later, hemoglobin level was 7.8 g/dL, white blood cell (WBC) count was $3.2 \times 10^9/L$ with a normal differential count, and platelet count $115 \times 10^9/L$. Bone marrow aspirate and biopsy showed dysplastic erythroid hyperplasia and 4% myeloblasts, a Prussian blue reaction (fig. 1), and features of multilineage dysplasia. Karyotype was normal.

Anemia worsened 3 months later, necessitating monthly red blood cell transfusions. Violaceous nodules, each measuring 0.5 to 1 cm, appeared across the patient's back and abdomen (fig. 2). Biopsy specimens showed dermal infiltration by monoblasts staining immunohistochemically for lysozyme, and myeloperoxidase. Hemoglobin level was 7.2 g/dL, WBC count was $26.8 \times 10^9/L$ with 35% neutrophils, 32% lymphocytes, 25% monocytes, 2% basophils, and 6% blasts, and platelet count was $93 \times 10^9/L$. The bone marrow was hypercellular (fig. 3). Blasts

were positive with naphthyl butyrate esterase and expressing CD45, HLA-DR, CD2, CD4, CD11b, CD11c, CD13, CD14, CD15, and CD33 by flow cytometry. Karyotype was again normal.

The diagnosis was made, and the appropriate therapy was initiated. Skin lesions regressed and disappeared completely by 7 weeks. A bone marrow sample after the termination of therapy showed reversion to MDS, without increased blast count. Anemia worsened again, necessitating transfusions. The patient had a fatal myocardial infarction 4 months later.

Diagnosis: Acute monoblastic leukaemia-leukaemia cutis after progression of refractory anemia with ringed sideroblasts and multilineage dysplasia.

Ανάληψη κλινικών αποφάσεων

Κριτήρια καταλληλότητας απεικονιστικών μεθόδων

Επιμέλεια: Θ. Βρακατσέλης

Κλινικό πρόβλημα ***

ΔΥΣΦΑΓΙΑ

ΑΠΕΙΚΟΝΙΣΤΙΚΗ ΜΕΘΟΔΟΣ	ΒΑΘΜΟΣ ΚΑΤΑΛΛΗΛΟΤΗΤΑΣ	ΣΧΟΛΙΑ
1. Στοματοφαρυγγική δυσφαγία γνωστής αιτιολογίας		
Τροποποιημένη κατάποση βαρίου + video ακτινοσκόπηση	8 Κατάλληλη	
Δυναμική και στατική απεικόνιση με βάριο του φάρυγγα	6 Πιθανώς κατάλληλη	
Διφασικό οισοφαγογράφημα	4 Πιθανώς ακατάλληλη	
Ενδοσκόπηση	4 Πιθανώς ακατάλληλη	
2. Στοματοφαρυγγική δυσφαγία άγνωστης αιτιολογίας		
Δυναμική και στατική απεικόνιση με βάριο του φάρυγγα	8 Κατάλληλη	
Διφασικό οισοφαγογράφημα	8 Κατάλληλη	
Τροποποιημένη κατάποση βαρίου + video ακτινοσκόπηση	6 Πιθανώς κατάλληλη	
Ενδοσκόπηση	4 Πιθανώς ακατάλληλη	
3. Οπισθοστερνική δυσφαγία		
Ενδοσκόπηση	8 Κατάλληλη	
Διφασικό οισοφαγογράφημα	8 Κατάλληλη	
Απλό οισοφαγογράφημα	6 Πιθανώς κατάλληλη	Εάν είναι η μόνη δυνατή εξέταση
Μανομετρία οισοφάγου	6 Πιθανώς κατάλληλη	Σε ανοσοϊκανούς
Μανομετρία οισοφάγου	4 Πιθανώς ακατάλληλη	Σε ανοσοκατασταλμένους