There is no significant association between use of β-blockers and depression

The Science behind the Tip

The methodological quality of early studies of the association of systemic or topical β-blocker therapy and depressed mood is weak. Most of the evidence supporting an association has used case reports. Further, the mechanism by which β-blockers might induce depression remains unclear. Lipophilic β-blockers easily penetrate the blood-brain barrier and should thus cause more central nervous system disturbances than hydrophilic ones. Yet, relative lipophilicity has not proved to play a role. The increased use of β-blockers in recent years in the treatment of myocardial infarction and heart failure has lead to renewed interest in the matter. Several syntheses of the data and a meta-analysis of randomized clinical trials have shown that the association is much weaker than originally believed and might even be non-existent. Additionally, a recent multicenter prospective study of post-myocardial infarction patients could not demonstrate an association in the first year of treatment.

In line with the cardiovascular literature, a retrospective observational population-based cohort study found no effect of topical β-blockers on the prevalence of depression among glaucoma patients.

References


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