

METOPROLOL FOR INTERMITTENT EXPLOSIVE DISORDER
(Case Report)

YILDIRIM, N., ARSAN, C.

ÖZET : Kombine diazepam-"thioridazine" tedavisi ve "carbamazepine" dahil daha önceki tedavilere iyi cevap vermemiş bir "zaman-zaman (intermittent) patlama bozukluğu" olan bir hasta, selektif bir B_1 -adrenoreseptör blokörü olan metoprolol ile çarpıcı bir biçimde düzelmiş, fakat propranolol ile yorgunluk hissetmeye başlamıştır. Bu olgu, daha önceki bir bildirideki sonuçları doğrulamakta olup B-blokörlerin öfke patlamaları üzerine etki mekanizması hakkında bazı anlayışlara yol açabilir.

ABSTRACT : Nuray YILDIRIM, Cevdet ARSAN, Dokuz Eylül University Medical Faculty. Metoprolol For Intermittent Explosive Disorder. One patient with intermittent explosive disorder who had not done well with previous medications, including combined diazepam-thioridazine treatment and carbamazepine, improved dramatically on metoprolol which is a selective B_1 -adrenoreceptor blocker, but experienced fatigue on propranolol. This case vignette confirms the results of a previous report and may have implications about the mechanism of action of B-blockers on temper outbursts.

Key words : Intermittent explosive disorder, Metoprolol.

Anahtar Sözcükler :

Metoprolol is a selective B_1 -adrenoreceptor blocker, which has recently been reported to be effective in the treatment of two patients with intermittent explosive disorder (1).

Uzm.Dr.Nuray YILDIRIM, Prof.Dr.Cevdet ARSAN, Dokuz Eylül Üniversitesi
Tıp Fakültesi Psikiyatri Anabilim Dalı.

Metoprolol produced confirmatory results in a patient with intermittent explosive disorder who was not sufficiently improved on combined diazepam- "thioridazine" treatment or on "carbamazepine". The condition of the patient was fair on propranolol, but this medication had to be discontinued because it caused fatigue and improvement was reproduced when metoprolol treatment was re-established.

The efficacy of propranolol, another B-adrenoreceptor blocker, was concluded as effective in reduction of violent behavior in patients with brain damage or dysfunction by some writers (2,3,4,5). It appeared as the drug of choice until Mattes (1) reported good results in two patients with intermittent explosive disorder and concomittant brain dysfunction or damage who could not be treatment with propranolol which caused depression or sedation in these patients.

CASE REPORT

Mr.A.B., a 38-year-old bachelor who worked at the family-owned bakery shop, had always been irritable, but he developed discrete episodes of loss of control of aggressive impulses after a car accident when he was 32 years old. During these episodes Mr.A.B. would assault strangers and throw or smash furniture with minimal or no provocation. There was spotty amnesia for the explosive period and the patient regretted the event afterward.

The patient had been unconscious for a few minutes after the accident. Neurological examination and a CAT scan was normal six years later. An EEG had previously led to a diagnosis of epilepsy originating from the left temporal lobe.

Mr. A.B. had been treated fith a combination of diazepam 5 mg t.i.d. and thioridazine 5 mg t.i.d. for several months with unwanted sedation and slight improvement. Therefore he was placed on carbamazepine 200 mg t.i.d. which however did not help him. His condition improved very much with metoprolol 100 mg t.i.d. After 40 days the patient was placed on propranolol 40 mg t.i.d. for trial purpose but his condition relapsed. The dose was increased to 60 mg t.i.d. one week later with considerable benefit but it caused the patient experience fatigue. Therefore metoprolol treatment was re-established. Six months later Mr. A.B. continued to show good result with normal liveliness.

DISCUSSION

This is a patient with temporal lobe dysrhythmia who had improved on metoprolol but not on carbamazepine. His condition meets the DSM-III criteria for intermittent explosive disorder.

Though the etiology is obscure this case vignette confirm the observations of Mattes (1) who reported two similar patients who responded well to metoprolol in much the same way, but had side effects with propranolol. Since metoprolol is a selective B₁-adrenoreceptor blocker and does not have propranolol's membrane-stabilizing effects the favourable outcome of the treatment may have implications about the mechanism of action of B-blockers on temper outburst.

KAYNAKLAR

1. Mattes, J.A. Metoprolol for intermittent explosive disorder. *Am J Psychiatry* 1985; 142, 1108-1109.
2. Elliott, F.A. Propranolol for the control of belligerent behavior following acute brain damage. *Ann Neurol* 1977; 1, 489-491.
3. Yudofsky, S., Williams, D., Gorman, J. Propranolol in the treatment of rage and violent behavior in patients with chronic brain syndromes. *Am J Psychiatry* 1981; 138, 218-220.
4. Williams, D.T., Mehl, R., Yudofsky, S. The effects of propranolol on uncontrolled rage outbursts in children and adolescents with organic brain dysfunction. *J Am Acad Child Psychiatry* 1982; 21, 129-135.
5. Massachusetts General Hospital : Propranolol as treatment of rage and violence in elderly patients. *Topics in Geriatrics* 1982; 1, 5-6.