Guillain-Barre Syndrome Following Cardiopulmonary Bypass

KARDIYOPULMONER BYPASS SONRASI GUI E LA IN-BA RR E SENDROMU

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SUMMARY

Acute inflammatory demyelinating polyradiculoneuropathy of the Gitllain-Bare syndrome is known to occur after infection (60%), immunization and surgery (10%). We describe one case in which it occurred after cardiopulmonary bypass done during mitral and aortic valves replacement. Though it may be no more than a chance association, we should be alert to unexplained weakness occurring after cardiopulmonary bypass.

The Guillain-Barre syndrome (GBS) is an uncommon disorder of obscure etiology: Guillain, Barre and Strohl, in 1916, gave the syndrome its eponym (GBS) (Macleod 1987). Acute inflammatory demyelinating polyradiculoneuropathy is characterized by an evolving symmetrical lower motor neuron paralysis. It occurs worldwide and in all age groups, with a reported incidence of 0.75 to 1.9/1000000/persons/ year (Renlund et al 1987). GBS is known to occur after infection (60%), immunization and surgery (10%) (McDonagh and Dawson 1987, Kaslow et al 1987). It has been estimated that 5% to 10% of cases follow surgery by an interval of 1 to 4 weeks. The occurrence has not been dependent on the type of surgery, the presence of infectious complications, or the mode of anesthesia. There is scant literature on the association between

ÖZET

Guillain-Barre Sendromu (GBS) olarak bilinen Akut inflamalıtar demieliıüzan poliradikülonöropati immuniza syondan sonra %60 infeksiyonlardan sonra ve % 10 major cerrahilerden sonra görülür. Burada cardiopıdmoner bypass ve iki yap (aort ve mitral) replasmanı sonrası gelişen GBS anlatılacaktır. Bu vak’a münasebeti ile karıdipulmoner by-pass sonrası hastada gelişebilecek neden-siz bir kas güçsüzlüğünü nörolojik yönünden dikkatlice incelenmesi gerekikliği vurgulanmıştır.


Literatürde GBS ile cardiopulmoner by-pass arası ilişki ile ilgili sınırlı yayın bulunmaktadır.

REPORT OF A CASE

A 51-year-old woman was operated with cardiopulmonary bypass for mitral and aortic valves re-
Cardiopulmonary bypass and CBS and WC herein report such a case.

Key Words: Guillain-Barre Syndrome, Cardiopulmonary Bypass


COMMENT

The pathogenesis of Guillain-Barre syndrome is poorly understood, but the disease seems to represent the unmasking of a latent neuropathy following immunologic stress (Renlund 1987). In the majority of patients, this stress is provided by a viral infection, but in approximately 10% of cases, as in the subject of this report, the possible precipitant is major surgery. Although the GBS is often thought to have a benign prognosis, 7% of patients die and a further 16% suffer residual disability (Winer et al 1985). Recovery may not begin for up to six weeks and full clinical recovery may take up to seven months after the maximum deficit has occurred (Briscoe et al 1987).

The incidence of GBS after cardiopulmonary bypass is low and it is unlikely that cardiopulmonary bypass represent a special stress or trigger to this disease. Though we might have observed no more than a chance association, we suggest that patients who complain of weakness or lethargy after cardiopulmonary bypass should undergo careful neurological examination.

KAYNAKLAR


