

Biz bu vakayı tartışırken yaşamın ilk yıllarından itibaren ortaya çıkan dilate kardiyomiyopati ve Sturge-Weber sendromunun birlikteliğinin rastlantısal olduğunu düşünmüyoruz. Sonuç olarak, her ne kadar bu birlikteliği açıklayabilecek bir patofizyolojik mekanizmamız olmasa da; nörokütanöz sendrom tanısı olan hastaların kalp yetmezliğinin erken teşhis ve tedavisinde transtorasik ekokardiyografi ile kontrol edilmesinin hastaların yaşamına olumlu katkı sağlayabileceği düşüncesindeyiz.

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Kaynaklar

1. Ingelfinger B, Polin-Gershon, Gellis&Kagan's Current Pediatric Therapy. 17th. Ed. Pennsylvania: W.B. Saunders Company; 2002. p.444- 5.
2. Kasper EK, Agema WR, Hutchins GM, Deckers JW, Hare JM, Baughman KL, et al. The causes of dilated cardiomyopathy: a clinicopathologic review of 673 consecutive patients. J Am Coll Cardiol 1994; 23:586-90. [CrossRef]
3. Bentson JR, Wilson GH, Newton TH. Cerebral venous drainage pattern of Sturge-Weber syndrome. Radiology 1971; 101:111-8.
4. Valente N, Guidugli Neto J, De Paola AA, Pimenta J. Total A-V block due to tuberous sclerosis. A case report. Arq Bras Cardiol 1989;53:225-7.
5. Toelle SP, Valsangiacomo E, Boltshauser E. Trichothiodystrophy with severe cardiac and neurological involvement in two sisters. Eur J Pediatr 2001;160:728-31.

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Does intermediate high-altitude level affect major cardiovascular outcomes of patients acute myocardial infarction treated by primary coronary angioplasty? Preliminary results of observational study

Orta-yüksek irtifa seviyesi primer koroner anjiyoplasti ile tedavi edilen akut miyokart enfarktüsü hastalarında majör kardiyovasküler sonuçları etkiler mi? Gözlemsel çalışmanın ön sonuçları

There is a positive correlation between increasing altitude and thrombosis of coronary arteries. Many of the previous studies have shown that altitude generates a thrombogenic environment, and so cardiovascular event (CV) events are more common at high altitudes (1). A study reported that acute coronary syndrome (ACS) have been shown to occur earlier ages at higher altitudes. The hypoxic environ-

ment of the high altitude primarily affects the respiratory and hematologic systems in the human adaptive system. Elevated hemoglobin (Hb) concentration with altitude has been shown to cause raised CV event incidence by creating an environment with higher viscosity. Coagulation factors increase with exposure to higher altitudes and they play important role in the thrombogenic events. Hypercoagulability occurs rapidly after exposure to high altitude and peaks at the end of the first week. Increasing altitude is associated with elevated factor 10-12 levels, shortened prothrombin time, and impairment of clot retraction. An another study showed that mean platelet volume (MPV) was increased in ACS patients living at high altitudes, and elevated MPV was claimed to be one of the causes underlying the thrombogenic environment induced by the high altitude.

Although previous studies reported that high altitude predict CV events, did not evaluate the prognostic significance (2). We enrolled 492 patients with ST segment elevation myocardial infarction (STEMI). One hundred nineteen of those patients were living at an intermediate altitude (1960 m) and 373 were living at sea level (0 m). Altitude was found to have an influence over some hematologic parameters, but neither altitude nor altitude-related hematologic parameters had an influence over the mid-term outcomes of STEMI patients who were treated with primary percutaneous coronary intervention. At month 6 (post procedure), the incidence for composite endpoint of CV mortality, reinfarction, urgent target vessel revascularization (TVR) and stroke/transient ischemic attack (TIA) was 18.7% for the overall population. There was no significant difference between intermediate and low altitude in regard to the incidence of cardiac death, urgent TVR, stroke/TIA and composite endpoints. However, intermediate altitude patients had a significantly higher reinfarction incidence than low altitude patients (18.5% vs. 11%, p: 0.03). History of previous statin use, Killip class 3/4, baseline left ventricular ejection fraction<40%, high peak CK-MB level, unsuccessful procedure and admission with acute stent thrombosis raised the composite endpoint risk.

Investigating the effects of altitude on the prognosis of CV events with prospective, randomized and multicenter studies may help us for filling the gap in the literature.

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References

1. Al-Huthi MA, Raja'a YA, Al-Noami M, Abdul Rahman AR. Prevalence of coronary risk factors, clinical presentation, and complications in acute coronary syndrome patients living at high vs low altitudes in Yemen. MedGenMed 2006; 8 :28.
2. Jha SK, Anand AC, Sharma V, Kumar N, Adya CM. Stroke at high altitude: Indian experience. High Alt Med Biol 2002; 3: 21-7. [CrossRef]

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