

Aort kapak replasmanında kullanılacak protezin daha iyi hemodinamik performans ve daha az transvalvüler gradiyente sahip olması hedeflenmektedir. Bu amaçlı protez aort kapak için farklı firmalara ait farklı kapak tipleri ve ölçüleri olan seriler mevcuttur. Yeni jenerasyon mekanik kapaklar konvansiyonel kapaklara göre geliştirilmiş iç çapları ile önemli üstünlük sağlanmaktadır. Bu üstünlük hem efektif orifis alanının artırılarak daha üstün bir hemodinami ve performans sağlamakta ve hem de aort anülüs genişletme gibi ek cerrahi prosedürler ile hastanın daha fazla mortalite ve morbiditeye maruz kalmasını engellemektedir. SJM-HP, SJM-Regent, ATS-AP gibi geliştirilmiş protez kapak modelleri mevcut olmakla birlikte yapılan çalışmada ATS-HP kapak serisinin kaynağı anlaşılamamıştır. Çalışmaya dahil edilen vakalara takılan ATS-HP seri kapaklar ile ilgili olarak yazarlarımızı saptayamadığımız bu kaynağı bize iletirlerse büyük katkı sağlayacakları kanısındayız.

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### Kaynaklar

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### Yazarın Cevabı

Sayın Editör,

Anadolu Kardiyoloji Dergisi'nin Mart 2012 sayısında yayınlanan, "Aort Darlığında Takılan Kapak Ölçülerinin Ventrikül Hipertrofisi Üzerine Etkileri" başlıklı yazımıza gösterdikleri ilgi için yazarlara teşekkür ederiz.

Yazımızdan da anlaşılacağı ve aslında mektubun yazarının kendisinin de belirttiği üzere burada vurgulamaya çalıştığımız kısım daha iyi hemodinamik performans ve daha az transvalvuler gradiyente sahip olan kapakların avantajlarıdır (1). Bu açıdan yazımızda çoğu yerde bu kapakların terminolojik olarak da genel kabul gören ismi olan Hemodinamik Performans (HP) adını ve kısaltmasını tüm markalar için kullandık. Bu nedenle burada da özel bir kapak tanımlamasından ziyade diğer kapaklarda olduğu gibi ATS Firmasına ait olan kapağın da 'Hemodinamik Performans' özelliğe olan modeli kastedilmiştir.

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## Hypothyroidism leading to a syncopal episode: a reminder to check drug interactions/A case of iatrogenic hypothyroidism presented with cardio-inhibitory syncope and resolved by thyroxine supplementation

*Hipotiroidizm senkop epizoduna götürüyor: İlaç etkileşimlerini kontrol etmek için bir hatırlatma/Tiroksin tedavisi ile düzelen kardiyoinhibitör senkop ile gelen iatrojenik hipotiroidili bir vaka*

Dear Editor,

We read with great interest the article: "A case of iatrogenic hypothyroidism presented with cardio-inhibitory syncope and resolved with levothyroxine supplementation" (1). Similarly we report a case of cardio-inhibitory syncope as a result of a drug interaction from an over the counter medication.

A 65-year-old female with a past medical history significant for hypothyroidism, hypertension and obesity was brought into the emergency room after experiencing a syncopal episode. Electrocardiogram revealed sinus bradycardia with heart rate-40 beats/min and findings of a new first-degree atrioventricular block (PR interval 0.24 s). Head computed tomography (CT) did not reveal any evidence of an acute hemorrhagic stroke. Carotid Doppler examinations were negative for evidence of stenosis. A complete metabolic profile and complete blood count were unrevealing as well. Thyroid function studies revealed a thyroid stimulating hormone (TSH) level of 125 mIU/mL with free thyroxine (T4) of 0.19 ng/DL. Three months prior to this episode, the patients TSH was 2.2 mIU/mL. Patient had been taking levothyroxine 100 mcg every day for the past 5 years without any prior abnormalities in her thyroid function tests.

Upon further questioning it was elicited that the patient had been also taking orlistat, an over the counter medication, to help lose weight under the guidance of a primary care physician. Orlistat was held immediately. Endocrinology was consulted and the patient was restarted on her home dose of levothyroxine as she had been therapeutic on prior to the initiation of levothyroxine. At a 6 month f/up, patient's bradycardia and first degree AV block had resolved. Her repeat thyroid functions revealed TSH of 5 mIU/mL and free T4 of 0.56 ng/dL.

Orlistat is a gastrointestinal lipase inhibitor that reduces absorption of dietary fat by thirty percent (2). A few cases have been described in the literature to suggest that orlistat may prevent the absorption of levothyroxine. It has been proposed that orlistat may decrease the absorption of levothyroxine in the small intestine (3).

This case similar to Evim et al. (1) describes cardio-inhibitory syncope related to hypothyroidism caused iatrogenically. A point to gain from this case is that patients with hypothyroidism are vulnerable to

developing cardiac manifestations as sequels of their disease if they are not treated appropriately. This is often avoidable in most situations, especially those that are iatrogenic. Furthermore, prompt identification of undertreated hypothyroidism and treatment can lead to the reversal of the underlying insult (4). Avoiding the addition of orlistat to this patient's medication regimen could have potentially prevented her syncope episode. As evidenced in the case we describe, we as physicians must continuously monitor patients with hypothyroidism, even those that have been stable. This involves screening closely for drug-drug interactions in patients taking thyroid replacement with regards to both prescription medications and those found over the counter.

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## Author's Reply

Dear Editor,

We appreciate the authors for their interest in reference to our article entitled 'A case of iatrogenic hypothyroidism presented with cardio-inhibitory syncope and resolved with levothyroxine supplementation' in *The Anatolian Journal of Cardiology* in March 2012 (1). The authors shared their clinical experience and comments with us, related to our article.

Similarly in their case, the pathophysiology of syncope was related with dysrhythmia (bradycardia and first -degree atrio-ventricular (AV) block) related to the cardio-inhibitory effects of hypothyroidism. But in contrast to our patient, who had been in hypothyroid state due to iatrogenic total excision of ectopic thyroid gland, which was the only source of thyroid hormones for our patient, without any replacement therapy, their patient had experienced iatrogenic hypothyroidism due to a drug interaction between orlistat, an over the counter medication to help lose weight, and levothyroxine which had been previously prescribed for her hypothyroidism

In status of hypothyroidism, life-threatening dysrhythmias such as bradycardia, AV blocks, prolonged QRS or QT intervals, Torsades -de -Pointes may occur (2-5) and these dysrhythmias resolve with hormone replacement (5, 6).

Clinician's global approach to patients is very important in current clinical experience, since there is an extreme specialization in medicine. A detailed history also including drug or herbal intake and a careful whole physical examination besides the consideration of laboratory test results are crucial for establishing the correct diagnosis and therefore enabling to start early suitable treatment.

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