transcatheter closure of secundum type ASDs.[4] As mentioned by Arslan et al.[3], oversizing, which may culminate in serious and undesired peri-procedural complications, is the main problem during balloon sizing. It has also been reported that balloon sizing is associated with higher procedural and fluoroscopy time and procedural cost without any advantage for procedural success.[5]

Accurate imaging of the anatomic features of the ASD is critical for appropriate patient selection, planning, and peri-procedural guidance in order to avoid complications. Traditionally, TEE imaging has been used by many centers during transcatheter closure of secundum type ASDs, as this is crucial in defining the "anatomic details" of an ASD before implantation of closure device (rims, maximum defect size and shape, etc). As a novel imaging modality during transcatheter ASD closure, 3D-TEE is an advantageous imaging tool that can accurately assess size, shape, orientation, numbers of orifices and rim status of an ASD in a single view.[6]

Besides its technological advantages, 3D-TEE is a noninvasive, widely available, portable test of lower cost. I am of the opinion that implementation of 3D-TEE guidance during ASD closure will increase procedural success and reduce complication rates in the near future. Therefore, more studies are needed to reach a common consensus on the issue of comparison of balloon sizing techniques, 2D-TEE, ICE and 3D-TEE data during transcatheter closure of ASDs.

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Does occupation refer to an advantage or obstacle before transradial cardiac catheterization?

To the Editor,

In a recent issue of your journal, Aykan et al. presented the predictors of radial artery diameter in patients suitable for transradial coronary angiography in their paper entitled 'Prediction of radial artery diameter in candidates for transradial coronary angiography: is occupation a factor?'[1] They reported wrist circumference, shoe size and occupation as independent predictors of radial artery diameter. In addition, radial artery diameter was found as smaller in patients with sedentary office work than in physically active outdoor workers (2.42±0.45 mm *vs.* 2.81±0.37 mm, p<0.001).

Transradial access during cardiac catheterization is widespread among interventional cardiologists as a safe and viable approach with a significantly reduced incidence of major access site-associated complications compared to the transfemoral approach.[2] However, the transradial approach is not free of common complications like asymptomatic radial artery occlusion, non-occlusive radial artery injury and radial artery spasm. Early diagnosis and immediate management of all these may be vital for the patient. Radial artery occlusion is known as the most common complication (~5–40% depending on center and study specific protocols) encountered after the tran-

sradial approach, and may be underestimated due to its uneventful clinical course.[3,4] Various risk factors including larger sheath size, lower arterial / sheath diameter, repeated cannulation, inadequate anticoagulation, longer duration of compression and high compression pressure have been implicated in radial artery occlusion.[2,5-7]

The exact pathophysiological mechanism of radial artery occlusion is unclear. Dual blood supply of the hand makes it difficult to diagnose silent episodes of radial artery occlusion after earlier catheterization. Also, protective approaches such as the modified Allen's test do not guarantee the prevention of radial artery occlusion. As mentioned in the study by Aykan et al.,[1] patients involved in active outdoor work have larger radial artery diameters, which might be due to adaptive responses. While larger radial artery diameter seems advantageous for patients with an outdoor occupation in preventing various procedural complications, it was not clear for those patients when undesired complications like radial artery occlusion occurred in the active hand. All those patients will need their active hand after transradial cardiac catheterization, both for continuing active occupations and repeated catheterization or graft harvesting in the future. Therefore, some of the advantageous factors should be interpreted and evaluated carefully, especially for patients undergoing transradial catheterization and working at outdoor occupations. In cases of silent and/or symptomatic radial artery occlusion, patients with actively working at outdoor may be disabled. Thus, before transradial catheterization, patient occupation should be evaluated carefully, not only for prediction of radial artery diameter, but also for prevention of postprocedural disabling.

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Left ventricular hypertrabeculation/ noncompaction in hyperoxaluria

To the Editor,

We read with interest the article by Arat et al. about a 19-year-old Caucasian male with primary hyperoxaluria resulting in renal failure nephrectomy, hemodialysis, and kidney and liver transplantation, who also presented with left ventricular hypertrabeculation/ noncompaction (LVHT).[1] We have the following comments and concerns.

LVHT is frequently associated with neuromuscular disorders (NMD)[2] and oxaluria may accompany myopathy.[3] Patients with oxaluria may also develop neuropathy.[3] Was this patient ever seen by a neurologist? Did he ever undergo nerve conduction studies or needle electromyography? Did he ever develop symptoms such as muscle weakness, wasting, muscle cramps, fasciculations, exercise intolerance, muscle aching, or sensory disturbances? Why are the authors so sure that fatigue was of cardiac origin and not attributable to muscle or nerve disease? Systolic function was almost fully preserved.[1]