



Akreditacija i ehokardiografija

Accreditation and echocardiography

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Sažetak

Abstract

Ehokardiografija predstavlja najčešće korištenu slikovnu metodu u kardiologiji. Zbog svoje dostupnosti, neinvazivnosti, kvalitete prikaza srčanih struktura te mogućnosti kvantificiranja funkcije srca u realnom vremenu, ova je metoda nezamjenjiva u dijagnostičkom procesu, a troškov-

Echocardiography represents the most frequently used imaging method in cardiology. Owing to its availability, non-invasive technique, quality of imaging cardiac structures and a possibility of quantification of the heart function in the real time, this method is irreplaceable in diag-



no učinkovita pri odabiru, praćenju i predskazivanju ishoda liječenja.

Ehokardiografski pregled predstavlja interakciju između osobe koja vrši pregled (operator), ultrazvučnog uređaja i pacijenta. Osobe uključene u ehokardiografsku dijagnostiku moraju posjedovati kognitivne i tehničke sposobnosti i vještine koje se stječu bazičnom, a usavršavaju kontinuiranom edukacijom. Kako su se u zadnjih 20 godina pojavili različiti novi modaliteti ehokardiografskih tehnika, posve je jasno da će postojati i različiti kognitivni zahtjevi koje će imati utjecaj na proces edukacije, dokumentiranosti i održavanja sposobnosti za izvođenje pojedine tehnike.

Proces edukacije uvijek mora započeti razumijevanjem fizičkih principa stvaranja slike i Dopplerskog signala da bi se osigurala pravilna i sigurna uporaba ehokardiografskog uređaja. Za pravilno razumijevanje i kliničku interpretaciju problema potrebno je poznavati anatomiju, fiziologiju, patofiziologiju i kardiologiju. Praktične vještine stječu se pridržavanjem standardiziranih protokola i unapređuju najprije pod nadzorom iskusnog operatora u lokalnom laboratoriju, slijedi usavršavanje na organiziranom tečaju individualne edukacije s evaluacijom sposobnosti kandidata za samostalno izvođenje i interpretaciju ehokardiografskih nalaza.

Prema rezultatima ankete iz Ujedinjenog Kraljevstva (Q J Med. 2008) mnoge transtorakalne ehokardiografske preglede (TTE) vrše operatori koji nemaju formalno procijenjenu sposobnost interpretacije TTE, a u manje od polovice bolnica vrši se nadzor kvalitete nalaza. Ovaj rezultat pomalo čudi, obzirom na činjenicu da je u toj zemlji proces nacionalne akreditacije za TTE započeo još 1994. godine.

Europsko udruženje za ehokardiografiju (EAE) od 2003. provodi standardizirani, europski, proces akreditacije osoba za TTE odraslih. Dokaz teoretskog znanja i vještina interpretacije ehokardiografskih nalaza treba biti potvrđen prolaskom na pismenom dijelu ispita, a praktična vještina se dokazuje evaluacijom dnevnika s dokumentiranim rezultatima pregleda. Proces akreditacije ima za cilj identificirati operatore koji mogu učiniti, interpretirati te samostalno i objektivno priopćiti rezultate TTE pregleda. Pored zaštite pacijenata od pregleda koje vrše nedovoljno kvalificirani operatori, akreditacija predstavlja europski standard sposobnosti i izvrsnosti. Pored akreditacije za TTE odraslih, pod okriljem EAE je i akreditacija iz transezofagusnog ultrazvuka odraslih, kao i ehokardiografija kongenitalnih bolesti srca. Kao logičan slijed procesa akreditacije operatera, EAE od nedavno organizira i proces akreditacije ehokardiografskih laboratorija s ciljem prepoznavanja kvalitetnih ehokardiografskih laboratorija ne samo pacijentima, nego i potencijalnim kandidatima za kontinuiranu profesionalnu edukaciju.

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nostic process and is cost-efficient in case of selection, monitoring and predicting the treatment outcome.

Echocardiographic examination represents an interaction between an examiner (operator), ultrasound device and a patient. The persons involved in echocardiographic diagnostics must possess cognitive and technical capabilities and skills that are acquired by basic and are improved by continuous education and training. Since some new and different modalities of echocardiographic techniques have appeared during the last 20 years, it is clear that there will be some different cognitive requirements as well that will impact the process of education, documentation and maintenance of abilities for performance of a specific technique.

The process of education and training must commence by understanding physical principles of creating the image and Doppler signal as to ensure a regular and safe use of the echocardiographic device. It is necessary to be familiar with anatomy, physiology, pathophysiology and cardiology for proper understanding and clinical interpretation of the problem. Practical skills are acquired by following standardized protocols and are advanced mainly under supervision of an experienced operator in the local laboratory, candidates are to attend organized training courses or individual training courses thereby evaluating candidates' ability for independent performance and interpretation of echocardiographic findings.

According to the survey results from United Kingdom (Q J Med. 2008) many transthoracic echocardiography (TTE) examinations are performed by operators who lack formally assessed ability for interpretation of TTE, and supervision of the findings quality is performed in less than half of the hospitals. This result is a little surprising considering the fact that the process of national accreditation for TTE in this country started in 1994.

The European Association of Echocardiography (EAE) from 2003 conducts a standardized, European, process of accreditation of persons for adult TTE. The evidence of theoretical knowledge and skills for interpreting echocardiography findings need to be verified by passing the written part of exam and practical skills are evidenced by the evaluation of a journal with documented examination results. The process of accreditation has a goal to identify operators who can perform, interpret and independently and objectively present the TTE examination results. Besides the protection of a patient from the examination performed by inadequately qualified operators, the accreditation represents the European standard of ability and excellence. Besides the accreditation for adult TTE, EAE supervises the accreditation of adult transesophageal echocardiography and of congenital heart diseases echocardiography. As a logical sequence of operators' accreditation process, EAE has recently started organizing the process of echocardiography laboratory accreditation for the purpose of recognizing high-quality echocardiography laboratories not only for patients, but also for potential candidates for their continuous professional education and training.

Sretna nova godina 2010.

♥ Happy New Year 2010

Uredništvo *Kardio lista*