Perikarditis, perikardni izljev i komplikacije

Pericarditis, pericardial effusion and complications

Hrvoje Pintarić

Clinical Hospital Sestre milosrdnice, Zagreb

Upale perikarda dijele se na primarne, gdje je srčana ovojnica neposredno zahvaćena upalnim procesom ili sekundarne koje su posljedica drugih bolesti ili zbivanja u organizmu. Perikarditis može proteći pod slikom akutnog, subakutnog ili kroničnog tijeka, a akutna upalna reakcija, neovisno o uzročniku, dovodi do patohistoloških i fizikalnih promjena srčanih ovojnica i perikardne šupljine te posljedično do razvoja perikardnog izljeva. Nastanak perikardnog izljeva u nekih bolesnika može proteći bez značajnijih simptoma, no ako nastaje naglo, dovodi do porasta intraperikardnog tlaka te posljedične tamponade srca. Takav, hemodinamski značajan perikardni izljev je rijedak, no potencijalno smrtonosan.

Etiološki, perikardni se izljev najčešće javlja kao posljedica infekcija, neoplazmi, zatajivanja bubrega, u hipotiroidizmu, infarktu miokarda, akutnom pankreatitisu, hiperkolesterolemiji, postperikardiektomnom sindromu, bolestima vezivnog tkiva, pri disekciji aorte, traumama, postiradiacijski, te kao komplikacija invazivnih kardioloških postupaka ili primjene određenih lijekova. Točniji literaturni podatci o učestalosti hemodinamski značajnog perikardnog izljeva, etiologiji i posljedičnoj smrtnosti su manjkavi.

Dijagnoza perikardnog izljeva postavlja se anamnestički te fizikalnim pregledom, uz inicijalne laboratorijske parametre, RTG snimku srca i pluća, elektrokardiogram, ehokardiografiju te kompjutoriziranu tomografiju ili magnetsku rezonancu prsnog koša. Klinički, tamponadu srca karakterizira pojava paradoksnog pulsa, koji je ominozan znak i ukazuje na potrebu brzog liječenja.

Istraživanjem jednogodišnjeg perioda u Koronarnoj jedinici Kliničke bolnice Sestara milosrdnica liječili smo 20 bolesnika s hemodinamski značajnim perikardnim izljevom (1,97% od ukupnog broja hospitaliziranih u Koronarnoj jedinici). Etiološki, perikardni izljevi bili su posljedica neoplazmi, infekcija, rupture srca ili aorte te hipotiroidizma. Najučestaliji simptomi u ovih bolesnika bili su dispneja, retrosternalni bolovi, neproduktivni kašalj i intolerancija napora. Od kliničkih znakova dominirali su tahikardija i tihi srčani tonovi pri auskultaciji, arterijska hipotenzija i hepatomegalija, distendirane vratne vene, povišena tjelesna temperatura, a u laboratorijskim nalazima leukocitoza i ubrzana sedimentacija eritrocita. U standardnom EKG-u najveći broj bolesnika imao je mikrovoltažu, tahikardiju i nespecifične promjene ST spojnice i T vala, a na RTG snimci srca i pluća uvećanu srčanu sjenu te prisustvo pleuralnog izljeva. Ehokardiografski dominantan je bio nalaz perikardnog izljeva, koji je mjerio u prosjeku 2.5 cm (±1.2) uz, u pravilu, zadebljane listove perikarda te prisustvo dijastoličkog kolapsa desnog ventrikula.

Pericardium inflammations are divided into primary, whereas the pericardium is affected by inflammatory process or secondary inflammations as a consequence of some other diseases or processes in the body. Pericarditis may show acute, subacute or chronic manifestations, and the acute inflammatory reaction independent of a cause leads to pathohistological and physical changes of pericardial membranes and pericardial cavity and consequently to development of pericardial effusion. The origination of the pericardial effusion in some patients may occur with no significant symptoms, but if it occurs suddenly, it leads to an increase in intrapericardial pressure and consequential pericardial tamponade. Such hemodynamically significant pericardial effusion is rare, but is potentially lethal.

Etiologically, pericardial effusion usually occurs as a consequence of infections, neoplasms, renal failure, in hypothyroidism, myocardial infarction, acute pancreatitis, hypercholesterolemia, postpericardialectomiam syndrome, connective tissue diseases, as a consequence of aortic dissection, traumas, post-radiation events, and as a complication of invasive cardiac procedures or administration of some drugs. More precise data from the literature on frequency of hemodynamically significant pericardial effusion, etiology and consequential mortality are insufficient.

The diagnosis of pericardial effusion is to be made by history and physical examination, applying initial lab parameters, chest X-ray, electrocardiogram, echocardiography and chest computerized tomography or magnetic resonance. Clinically, the pericardial tamponade is characterized by the phenomenon of paradox pulse, which is an ominous sign and requires immediate treatment.

One year research in the Coronary Care Unit (CCU) of the Clinical Hospital Sestre milosrdnice included 20 patients with hemodynamically significant pericardial effusion (1.97% of total number of hospitalized patients in the CCU) were treated. Etiologically, pericardial effusions were a consequence of neoplasm, infections, heart or aorta ruptures and hypothyroidism. The most frequent symptoms in such patients were dyspnea, retrosternal pains, non-productive coughs and effort intolerance. Concerning clinical signs, tachycardia and silent heart tones during auscultation, arterial hypotension and hepatomegaly, distended neck veins, higher body temperature were dominant, and with regard to laboratory tests, leukocytosis and accelerated erythrocytes sedimentation rate were dominant. With regard to standard ECG, a largest number of patients underwent microvoltage, tachycardia and non-specific changes to ST-segment and T wave, and in the chest X-ray there was an enlarged heart shadow and pleural effusion. Echocardiographically, the finding of pericardial effusion was dominant, amounting in average to 2.5 cm (±1.2) with thickened pericardium leaves and presence of diastolic collapse of the right ventricle.

U liječenju ove skupine bolesnika korišteni su indometacin, antibiotici, analgetici i kortikosteroidi. U tri bolesnika učinjena je perikardiocenteza, a u dva perikardiektomija. Tijekom liječenja dva su bolesnika umrla, a trinaest ih je otpušteno iz Koronarne jedinice u poboljšanom stanju.

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E-mail: hrvojepintaric@yahoo.com

While treating this group of patients, indomethacine, antibiotics, analgetics and corticosteroids were used In three patients, pericardiocentesis was performed, and in two patients pericardiectomy was performed. During the treatment, two patients died, and 13 of them were discharged from the CCU in improved condition.