DOI:

KONTUZIJA MIOKARDA ČESTO ZABORAVLJENA DIJAGNOZA U TUPOJ TOTAKALNOJ TRAUMI - PRIKAZ SLUČAJA

MYOCARDIAL CONTUSION, AN OFTEN FORGOTTEN DIAGNOSIS IN BLUNT TOTAL TRAUMA - CASE REPORT

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SAŽETAK

Trauma predstavlja četvrti vodeći uzrok smrti u svetu.Saobraćajnim traumatizmom smatra se najčešćim(18-25%).Tupu torakalnu traumu ističe visok mortalitet(10-25% ukupnog trauma mortaliteta) na mestu nesreće ili u prvih 48h što se dovodi u vezu sa traumom miokarda – kontuzija miokarda i povredom velikih krvnih sudova.Kontuzija miokarda tzv. nagnječenje miokarda/„modrica srčanog mišića“ predstavlja nemogućnost adekvatne kontraktilne sposobnosti miokarda.Zastupljena je u oko 15% tupe torakalne traume, dok je fraktura sternuma u 10% slučajeva predstavljana kao glavni uzrok. Klinička prezentacija i simptomi zavise od mehanizma povređivanja i jačine primenjene sile, ali najčešće i najsličniji su akutnom koronarnom događaju-bol u grudima bez propagacije refraktoran na nitroglicerin,nedostatak daha,lupanje preskakanje srca uz nesvestice uz podatak tupe traume uvek zahtevaju intenzivan monitoring i trebaju nas uputiti na kontuziju miokarda dok se drugačije ne dokaže.

Muškarac starosti 55 godina primljen je u intenzivnu negu nakon povreda zadobijenih u saobraćajnoj nezgodi prevrtanjem motornog vozila tokom radnog vremena kao vozač službe hitne pomoći. U momentu prijema svestan, komunikativan, orjentisan rekonstruiše događaj u potpunosti,navodi kratkotrajno pomućenje senzorijuma za trenutak nesreće ali bez pratećih subjektivnih tegoba u tom trenutku.Inicijalno hemodinamski normotenzivan, srčana radnja ritmična mirna tonovi tiši čujni, respiratorno stabilan žali se na osećaj nedostatka vazduha i bol u grudnom košu pri pokušaju dubokog udaha, bez drugih vidljivih povreda. Inicijalni EKG zapis srčana radnja tahikardna, prošireni QRS kompleksi u pravcu BLG.Nakon kraće obrade, simptomatske terapije i pripreme urađena je skener dijagnostika po protokolu za traumu – nalaz na endokranijumu, abdomenu i maloj karlici uredan dok na grudnom košu uočava se serijska fraktura prednjih okrajaka desno II-VIII rebra, levo II do IX rebra uz dislokaciju fragmenata od IV do VII rebra levo.znaci subkutanog emfizema levo. U perikardu znaci pneumoperikarda i pleuralni izliv do 20mm uz minimalni pneumotraks levo. U srednjem lobusu i anteriornom segmentu desnog gornjeg lobusa zone “ground glass”denziteta koje idu u prilog kontuziji.

Po završenoj dijagnostici pacijent se žali na težinu u grudima i nelagodnost, monitorski verifikovana hipotenzija praćena izmenama u EKG zapisu u pravcu ST depresija u D1-2 AVL, V3-5 do 1mm. Obzirom da se radi o pacijentu bez prethodne kardiološke anamneze, bez anginoznih tegoba i bez ranije izmenjenog EKG zapisa odmah uzeti kardispecifični enzimi koji su pokazali desetostruki porast, uključena simptomatska terapija analgetici, antiaritmici i terapija za akutni koronarni dogadjaj.Pozvan internista u hitnu konsultaciju.Urađen ultrazvuk srca(UZ) gde se uočavaju segmentni ispadi u kinetici uz hipokineziju donjeg i lateralnog zida,ejekciona frakcija leve komore oko 50% sa minimalnim perikardnim izlivom do 12mm i raslojanjem perikarda.U daljem toku zbog postavljanja sumnje na akutni koronarni događaj urađena koronarografija,uredan nalaz sto ukazuje na kontuziju miokarda u sklopu tupe torakalne traume.Nakon 48h potpuna normalizacija EKG zapisa,kardiospecifičnih enzima i kliničkih tegoba.Pacijent u dobrom opštem stanju otpušten kući sa savetom za kontrolni UZ nakon mesec dana.

Postavljanje dijagnoze kontuzije miokarda uz nespecifičnu simptomatologiju otežano je nedostatkom idealnog dijagnostičkog testaje teško.Ovo navodi na potrebu za razvojem protokola i algoritama pristupa pacijentu kada se posumnja na kontuziju miokarda uz širenje svesti o ovoj dijagnozi koja brzim, ciljanim i usmerenim delovanjem ima dobru prognozu i povoljan ishod za pacijenta.

Ključne reči: tupa torakalna trauma, saobraćajni traumatizam, kontuzija miokarda, perikardni izliv, ultrazvuk srca

ABSTRACT

Trauma is the fourth leading cause of death in the world. Traffic trauma is considered the most common (18-25%). Blunt thoracic trauma is characterized by high mortality (10-25% of total trauma mortality) at the scene of the accident or in the first 48 hours, which is associated with myocardial trauma - myocardial contusion and injury to large blood vessels. contusion of the myocardium/"heart muscle bruise" represents the impossibility of adequate contractile capacity of the myocardium. It is present in about 15% of blunt thoracic trauma, while sternum fracture is the main cause in 10% of cases. The clinical presentation and symptoms depend on the mechanism of injury and the strength of the applied force, but they are most often and most similar to an acute coronary event - chest pain without propagation refractory to nitroglycerin, shortness of breath, palpitations, heart palpitations with fainting and blunt trauma always require intensive monitoring and should be referred to myocardial contusion until proven otherwise.

A 55-year-old man was admitted to intensive care after injuries sustained in a motor vehicle rollover accident during working hours as an ambulance driver. At the moment of admission, he is conscious, communicative, oriented, reconstructs the event completely, states a short-term confusion of the sensorium for the moment of the accident, but without accompanying subjective complaints at that moment. Initially, hemodynamically normotensive, heart rate rhythmic, calm tones, quieter audible, respiratory stable, he complains of a feeling of lack of air and pain in the chest when trying to take a deep breath, without other visible injuries. The initial ECG record is tachycardia, widened QRS complexes in the direction of BLG. After a short treatment, symptomatic therapy and preparation, a diagnostic scanner was performed according to the protocol for trauma - findings on the endocranium, abdomen and pelvis were normal, while on the chest, a serial fracture of the front edges of the right II-VIII ribs, left II to IX ribs with dislocation of fragments from IV to VII ribs on the left. signs of subcutaneous emphysema on the left. In the pericardium, signs of pneumopericardium and pleural effusion up to 20 mm with minimal pneumothorax on the left. In the middle lobe and the anterior segment of the right upper lobe, there are "ground glass" density zones that favor contusion. After the diagnosis, the patient complains of heaviness in the chest and discomfort, monitor-verified hypotension followed by changes in the ECG record in the direction of ST depression in D1-2 AVL, V3-5 up to 1mm. Given that this is a patient with no previous cardiac history, no anginal complaints and no previously altered ECG record, cardiac specific enzymes were immediately taken which showed a tenfold increase, symptomatic therapy with analgesics, antiarrhythmics and therapy for an acute coronary event was included. left ventricle about 50% with a minimal pericardial effusion up to 12 mm and pericardial delamination. In the further course, due to the suspicion of an acute coronary event, a coronary angiography was performed, a neat finding indicating a myocardial contusion as part of a blunt thoracic trauma. After 48 hours, complete normalization of the ECG records, cardiospecific enzymes and clinical symptoms. The patient was discharged home in good general condition with advice for a follow-up ultrasound after one month.

Establishing a diagnosis of myocardial contusion with non-specific symptomatology is difficult due to the lack of an ideal diagnostic test. This leads to the need for the development of protocols and algorithms for patient access when myocardial contusion is suspected while spreading awareness about this diagnosis, which, with quick, targeted and directed action, has a good prognosis and a favorable outcome for the patient.

Key words: blunt thoracic trauma, traffic trauma, myocardial contusion, pericardial effusion, heart ultrasound