Akutni kolecistitis povezan s elektrokardiografskim promjenama ST-T segmenta i porastom srčanih biomarkera

Acute cholecystitis associated with electrocardiographic ST-T segment changes and cardiac biomarker elevation

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Uvod: Akutni kolecistitis često je povezan s prolaznim elektrokardiografskim promjenama ST-T segmenta i porastom srčanih biomarkera, sa ili bez ishemije miokarda. Porast troponina u akutnom kolecistitisu je opisan, no vrlo je malo podataka o visokosenzitivnom troponinu (hsT).¹ Predstavljamo slučaj 77-godišnje bolesnice sa simultanim razvojem akutnog kolecistitisa i elektrokardiografskih i laboratorijskih promjena karakterističnih za infarkt miokarda.

Prikaz slučaja: 77-godišnja bolesnica prezentirala se s bolovima u gornjem desnom gornjem kvadrantu abdomena, mučninom i povraćanjem, bez bolova u prsima. Vitalni parametri bili su uredni. U 12-kanalnom EKG-u vidljiva fibrilacija atrijske depresije ST segmenta i inverzijom T valova u većini odvodova. Laboratorijski nađen uredan broj leukocita te razina CRP-a, aminotransferata i amilaza. Bilirubin je bio 28,8 µmol/L, hsT 66 ng/L, CK 216 U/L. Ultrazvukom abdomena nađen je uredan žučni mjehur s dva kamenca u lumenu. Ehokardiografski je nađena blago snižena sistolička funkcija lijeve klijetke (LVEF 48 %), bez regionalnih ispada kontraktiliteta. U ponovljenim laboratorijskim nalazima nađen porast hsT do 1076 ng/L i CK do 489 U/L. Bolesnica je primljena u Zavod za intenzivnu kardiološku skrb pod radnom dijagnozom akutnog koronarnog sindroma. Sljedeći dan bolesnica postaje febrilna (39,0°C) uz jaku bolnost gornjeg dijela abdomena, pozitivan Murphyjev znak, a u laboratorijskim nalazima porast leukocita do $13,1 \times 10^9/L$ i CRP 214 mg/L. Ponovljeni ultrazvuk abdomena pokazao je distenziju žučnog mjehura, zadebljanje te impakciju jednog kamenca u ductus cysticus. Indicirano je kirurško liječenje. Bolesnica je klasificirana kao ASA IV/V i premještena u Zavod za abdominalnu kirurgiju. Nakon kirurškog zahvata, bolesnica je razvila sepsu i, dva dana nakon zahvata, kardiorespiratorni arest refraktoran na mjere kardiorpulmonalne resuscitacije. Na zahtjev obitelji, nije učinjena obdukcija.

Zaključak: Nespecifične elektrokardiografske promjene ST-T segmenta i porast srčanih biomarkera koji je karakterističan za teški akutni kolecistitis može maskirati akutnu abdominalnu patologiju, osobito u ranoj fazi bolesti, što može dovesti do odgođenog postavljanja dijagnoze. Štoviše, prognoza je lošija bolesnicima sa znakovima ishemije miokarda.

Introduction: Acute cholecystitis is often associated with transient electrocardiographic ST-T segment changes and cardiac biomarker elevation with or without myocardial ischemia. Elevation in troponin in acute cholecystitis are well described, however, few data exist on high sensitivity troponin (hsT).¹ We present a case of a 77-year-old female with simultaneous development of acute cholecystitis and ECG and laboratory changes characteristic for myocardial infarction.

Case report: 77-year-old female presented with right upper abdominal quadrant pain, nausea and vomiting, denying chest pain. Vital signs were normal. Physical examination revealed right upper quadrant and epigastric tenderness. 12-lead ECG showed atrial fibrillation with ST segment depression and T-waves inversion in the most leads. Laboratory investigations showed normal WCC count, CRP, aminotransferase and amylase levels, bilirubin was 28.8 µmol/L, hsT 66 ng/L, CK 216 U/L. Abdominal ultrasound revealed normal gallbladder wall and two stones in the lumen. Echocardiography revealed mildly reduced systolic function (LVEF 48%) with no regional contractility abnormalities. Repeated laboratory findings showed elevation in hsT to 1076 ng/L and CK to 489 U/L. Patient was admitted to Cardiology Intensive Care Unit with working diagnosis of acute coronary syndrome. Next day patient became febrile (39.0 C), with severe tenderness of upper abdomen, positive Murphy's sign, findings showed elevation in WCC $13.1 \times 10^9/L$ and CRP 214 mg/L. Repeated ultrasound showed gallbladder distention, wall thickening, impaction of one of the stones in cystic duct, so indication for surgical treatment was established. Classified as a ASA IV/V class the patient was transferred to Abdominal Surgery Department. After surgery, patient developed sepsis and two days following surgery a cardiorespiratory arrest resistant to cardiopulmonary resuscitation. According to patients family request, autopsy has not been performed.

Conclusion: Nonspecific electrocardiographic ST-T segment changes and cardiac biomarker elevation characteristic for severe acute cholecystitis could mask acute abdominal pathology, especially in early stages of the disease, which could lead to delay in establishing the diagnosis. Nevertheless, if signs of myocardial ischemia are present the prognosis is worse.

LITERATURE

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