



Fever of unknown origin: Most frequent causes in adults patients

Febrilno stanje nejasne etiologije: najčešći uzroci kod odraslih bolesnika

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Abstract

Background/Aim. The differential diagnosis of fever of unknown origin (FUO) includes more than 200 different diseases and conditions. The aim of this study was to identify the most frequent causes of FUO among adult patients according to gender and age. **Methods.** The study included 74 patients examined from June 2010 to June 2013 at the Infectious Disease Clinic, Clinical Center Kragujevac in Serbia, according to the defined criteria for FUO. The patients were divided according to the diagnosis into four groups: infectious, malignant, rheumatic and “other diseases”. A cause of febricity could not be established in a portion of subjects, and they comprised the group of undiagnosed cases. **Results.** Infectious diseases were dominant in the study, followed by rheumatic diseases, which were most frequently found in women and the elderly. The diseases recognised as the most common causes of febricity were subacute thyroiditis, subacute endocarditis, Still’s disease, rheumatic polymyalgia with or without temporal arteritis, and cytomegalovirus infection. In 44% of the patients, the final diagnosis was composed of only six clinical entities. **Conclusion.** The importance of establishing the diagnosis of rheumatic disease is especially emphasised, in line with other authors’ research indicating the number of these diseases is on the rise. The diagnostic approach to FUO should always be directed to the known frequency of diseases.

Key words:

fever of unknown origin; diagnosis; diagnosis, differential; age groups; sex.

Apstrakt

Uvod/Cilj. Diferencijalna dijagnoza febrilnih stanja nepoznatog porekla (*fever of unknown origin* – FUO), obuhvata preko 200 različitih bolesti i stanja. Cilj rada bio je da se odrede najčešći uzroci FUO prema polu i životnom dobu. **Metode.** Ispitivanjem su obuhvaćena 74 bolesnika koja su u periodu od juna 2010. do juna 2013. godine bila lečena u Infektivnoj klinici Kliničkog centra u Kragujevcu prema definisanim kriterijumima za FUO. Prema dijagnozi bolesnici su svrstani u četiri grupe: infektivne, maligne, reumatske i “druge bolesti”. Kod dela bolesnika nije utvrđen uzrok febrilnosti i oni su činili grupu sa nedijagnostikovanim bolestima. **Rezultati.** U našem istraživanju dominirale su infektivne bolesti, zatim reumatske, najviše zastupljene kod ženskog pola i starije populacije. Bolesti koje su se izdvojile kao najčešći uzroci febrilnosti bile su subakutni tireoiditis, subakutni endokarditis, Stilova bolest, reumatska polimijalgija sa ili bez temporalnog arteritisa i citomegalovirusna infekcija. Kod 44% febrilnih bolesnika završnu dijagnozu činilo je svega šest kliničkih entiteta. **Zaključak.** Posebno se ističe značaj utvrđivanja dijagnoze reumatskih bolesti, čiji je broj u porastu, što je u skladu sa istraživanjima drugih autora. Dijagnostički pristup FUO treba uvek da bude usmeren prema poznatoj frekvenciji bolesti.

Ključne reči:

febrilnost nejasne etiologije; dijagnoza; dijagnoza, diferencijalna; životno doba, grupe; pol.

Introduction

According to the traditionally accepted definition by Petersdorf and Beeson¹ in 1961, fever of unknown origin (FUO) means a repeated occurrence of fever above 38.3°C in the course of three weeks, the origin of which remains unresolved after three visits to the outpatient doctor or seven days of hospital examination. Thirty years later, with the development of modern diagnostic methods, Durack and Street² suggested two significant modifications to the initial definition: differen-

tiation between standard FUO and three other forms of febricity accompanied by neutropenia, nosocomial infections, and human immunodeficiency virus (HIV), and a shorter duration of hospital examinations - three days instead of seven.

FUO represents a great challenge to clinicians because its differential diagnosis is composed of more disorders than in any other medical condition, encompassing both very rare and relatively common entities, classifiable into four groups: infectious, malignant, rheumatic and “other” diseases^{3–5}. The published papers indicate that the differential diagnosis of fever

