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Importance of studying of procalcitonine and “C” reactive albumin in
diagnostics sphere of urethral sepsis
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We studied 37 (100%) patients of urethral sepsis, including 17(45,9%) women and 20(54,1%) men. 10 (27,0 %) were under 50 years(22%), 11(29,7 %) under 70 and above 70 years 16 (43.3%).

Critical care condition was caused because of ischemic and hemorrhagic insults, respiratory failure caused from pneumonia, acute cardiac failure, and sepsis. all patients suffered from additional diseases like diabetes, obstructive disease of lungs, and other pathologies. According to Glasgow scale condition of patients was under 8 points and “Appach-2” prognostic-analogous scale complied 32 an more points. Treatment included artificial breathe, correction of water and electrolytic balance, parenteral and enteral nutrition, antibacterial therapy and etc. All patients were 123,0 bed days in the clinic and in average it was 3,3. 4 of them deceased and it is 5,4% of lethality. The research have shown that showings of procalcitonine and “C” reactive albumin is a very effective diagnostic markers of urethral sepsis but not absolute ones because sometimes even in case of normal showings of them a patients suffered from urethral sepsis. It is also possible, that critical care patient may not suffer from urethra sepsis but has elevated showings of procalcitonine and “C” reactive albumin.

Key Words: sepsis, urethral sepsis, critical patients, procalcitonine, “C” reactive albumin.

Introduction: in past years there are lots of patients who suffer from urethral sepsis in clinics of critical care medicine (Z.Kheladze,Zv.Kheladze,2015) and lethality remains extremely elevated in those patients (Z.Kheladze,Zv.Kheladze,2016). The reason is that diagnostics of urethral sepsis is done lately and an adequate treatment as well. Some markers of urethral sepsis may relieve diagnostics and treatment of sepsis. The main role can be prescribed to procalcitonine and “C” reactive albumin concentration as early markers of urethral sepsis; so we think that this work is actual from this point of view.

Materials and Methods: We studied 37 (100%) patients of urethral sepsis, including 17(45,9%) women and 20(54,1%) men. 10 (27,0 %) were under 50 years(22%), 11(29,7 %) under 70 and above 70 years 16 (43.3%).

Critical care condition was caused because of ischemic and hemorrhagic insults, respiratory failure caused from pneumonia, acute cardiac failure, and sepsis. All patients suffered from additional diseases like diabetes, obstructive disease of lungs, and other pathologies. According to Glasgow scale condition of patients was under 8 points and "Appach-2" prognostic-analogous scale complied 32 an more points. Treatment included artificial breathe, correction of water and electrolytic balance, parenteral and enteral nutrition, antibacterial therapy and etc. All patients were 123,0 bed days in the clinic and in average it was 3,3. 4 of them deceased and it is 5,4% of lethality.

As control group we studied 35 totally healthy persons between 50-70 years and 24 critical care patients without urethral sepsis between 35-77 years condition of which was not associated with respiratory and blood circulations disorders or hemorrhagic and ischemic insults. Studying of procalcitonine and "C" reactive protein was implemented in aids of immunoferment method in peripheral vein blood of subjects.

Results and Discussion: the study has shown that procalcitonine concentration was elevated in 68,2% of critical patients and it is about $83,2 \pm 2,8$; this showing was not statistically different ($P > 0,05$) in healthy ($85,6 \pm 2,6$ mg/l) and critical patients ($80,0 \pm 1,1$ mg/l)

On this background "C" reactive protein concentration was 15,2 times more in sepsis patients ($66,8 \pm 1,2$ mg/l). This showing was statistically reliable and different in healthy ($5,0 \pm 0,5$ mg/l) and critical patients ($62,2 \pm 1,2$ mg/l)

Results of the study indicate that procalcitonine and "C" reactive protein are very effective diagnostic markers of sepsis and urethral sepsis but not absolute ones. Sometimes even in case of normal showings of them patients suffered from sepsis. It is also possible, that critical care patient may not suffer from urethral sepsis but has elevated showings of procalcitonine and "C" reactive albumin.

Conclusion: The research have shown that showings of procalcitonine and "C" reactive albumin is a very effective diagnostic markers or urethral sepsis but not absolute ones because sometimes even in case of normal showings of them a patients suffered from sepsis. It is also possible, that critical care patient may not suffer from urethral sepsis but has elevated showings of procalcitonine and "C" reactive albumin.

References:

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პროკალციტონინის და “C”რეაქტიული ცილის შესწავლის
მნიშვნელობა უროსეფსისის დიაგნოსტიკის საქმეში
კრიტიკული მედიცინის ინსტიტუტი,თბილისი,საქართველო**

შესწავლილია უროსეფსისის მქონე 37(100,0%) ავადმყოფი.მათ შორის ქალი იყო 17(45,9%),კაცი 20(54,1%). 50 წლამდე ასაკის იყო 10 (27,0 %), ავადმყოფი,70 წლამდე 11(29,7 %), ავადმყოფი და 70 წელს ზევით 16 (43.3%) ავადმყოფი. ყველა ავადმყოფს თანმხლები დაავადების სახით აღენიშნებოდა ჰიპერტონული დაავადება,შაქრიანი დიაბეტი,ფილტვების ობსტრუქციული დაავადება და სხვა ქრონიკული პათოლოგიები.ცნობიერების დონე ყველა ავადმყოფში გლაზგოს შკალით 8 ბალზე ნაკლები იყო,ხოლო საერთო მდგომარეობის სიმძიმე “Appachi-2” პროგნოზულ-ანალოგიური შკალით შეადგენდა 32 და მეტ ქულას,.მკურნალობა მოიცავდა ხელოვნურ სუნთქვას,წყლისა და ელექტროლიტების ცვლის კორექციას,პარენტრალურ და ენტერალურ კვებას,ანტიბაქტერიულ თერაპიას და სხვა სტანდარტულ ღონისძიებებს.ამ ავადმყოფებმა კლინიკაში დაჰყვეს 123,0 საწოლ-დღე. ასე რომ თითოეული ავადმყოფის საწოლ-დღეზე დაყოვნება შეადგენდა 3,3 საწოლ-დღეს. გარდაიცვალა 2 ავადმყოფი,რაც შეესაბამება ლეტალობის 5,4% მაჩვენებელს.

კვლევამ უჩვენა,რომ პროკალციტონინი და “C” რეაქტიული ცილის მაჩვენებლები წარმოადგენენ უროსეფსისის დამდასტურებელ ეფექტურ სადიაგნოზო მარკერებს,თუმცა არა აბსულუტურს,რადგანაც იყო შემთხვევები,როდესაც პროკალციტონინი და “C”რეაქტიული ცილის ნორმალური მაჩვენებლების ფონზე ავადმყოფებს მაინც დაუდასტურდათ

სეფისის არსებობა.სევე ზოგიერთ შემთხვევაში
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მომატებული იყო სეფსისის,სახელობრ უროსეფსისის არ
მქონე კრიტიკულ ავადმყოფებშიც.