

Spectrum of Bacterial Isolates and Diagnoses in Physiotherapy and Rehabilitation Facility before and after Armed Conflict in Iraq (Research Note)

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Original Article

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Abstract:

Etiology and spectrum of diagnoses in the refugee population in the Physiotherapy and Rehabilitation Mobile Clinic is discussed. The Clinic is located in the conflict area of Dohuq, Iraq. The area was largely influenced by *Freedom* operations in Mosul. Before the conflict, species such as *S. aureus*, *S. pyogenes* and *S. epidermidis* were prevalent. After the conflict, spectrum of bacterial isolates was significantly different; most prevalent species were *A. baumannii*, *Ps. aeruginosa* and *Enterobacteriaceae*.

Conflict of interests:

The authors whose names are listed in the title of the article certify that they have NO affiliations with or involvement in any organization or entity with any financial interest (such as honoraria; educational grants; participation in speakers' bureaus; membership, employment, consultancies, or other equity interest), or non-financial interest (such as personal or professional relationships, affiliations, knowledge or beliefs) in the subject matter or materials discussed in this manuscript.

Background

During war conflict in Iraq, some of the facilities previously used for treatment of chronic patients have changed to Acute Departments and Clinics. Armed conflict ongoing in Iraq caused lack of staff and other resources, such as electricity, material and/ or infrastructure. One of these clinics is situated about 15km from Mosul and serves as a Rehabilitation Center for war victims.

The aim of this study was to compare the spectrum of bacterial isolates in the patients from the conflict area of Mosul who were treated in the Rehabilitation and Physiotherapy Ward in Dohuq, Iraq.

Patients and methods

The research group consisted of 197 patients treated after war conflict at the Physiotherapy and Rehabilitation Ward. Medical data of these patients were analyzed and compared to the patients treated before the conflict. EPI-15 System was used for analysis and T-test.

Results and discussion

In Group 1 (pre-conflict period), majority of the patients had cardiovascular and diabetic complications or non-traumatic wounds, such as lower leg ulcers, erysipelas and others. Most common pathogens found in the swabs collected from the wounds were *S. aureus* (7/20, 35%, $p>0.05$) and *S. pyogenes* (6/198, 3%). Vice versa, in post conflict group, traumatic or post-traumatic SSTI occurred, mostly after amputations or severe wounds due to bombing. In these wounds, most prevalent species were *A. baumannii*, *Ps. aeruginosa* and *Enterobacteriaceae*.

Conclusion

Conflicts largely influence spectrum of bacterial isolates among rehabilitation and physiotherapy patients. In ATB prophylaxis this should be considered as well.

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