Focus of Infection and Microbiological Etiology in Community-Acquired Infections in Hospitalized Adult Patients in the Faroe Islands

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INTRODUCTION

The aim of the present study was to gain national data on the clinical and microbiological characteristics of community-acquired infections in the Faroe Islands and to compare these data with data from other geographical areas.

METHODS

A prospective, observational study involving all patients >= 16 years admitted to The Medical Department at the National Hospital, Torshavn, Faroe Islands from October 2013 until April 2015.

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RESULTS

Of 5,279 admissions, 1,054 cases were with community-acquired infection and were included in the study. Out of these 1,054 cases, 471 did not meet the criteria for SIRS (systemic inflammatory response syndrome), while the remaining 583 cases had sepsis. Mean age was 68 years. At least one comorbidity was found in 80% of all cases. Documented infections were present in 75%, and a plausible pathogen was identified in 29% of all cases. The most common gram-positive pathogen was *Staphylococcus aureus*, and the most frequent gram-negative pathogen was *Escherichia coli*. The most common focus of infection was lower respiratory tract, followed by urinary tract, and skin-soft tissue/bone-joint. Bacteremia was found in 10% of the cases.

CONCLUSION

In community-acquired infections in hospitalized patients in the Faroe Islands the lower respiratory system and the urinary tract were the most frequent foci of infection. Gram-negative pathogens and *Escherichia coli* were the most frequent pathogens in infection without systemic inflammatory response syndrome, in sepsis and in bacteremia. Our data on clinical characteristics and microbiological etiology provide new information which may be used to develop local guidelines for the managing of patients admitted with community-acquired infections.

Infection	Infection without SIRS			Sepsis			Severe sepsis			Septic shock		
	Total	male	female	Total	male	female	Total	male	female	Total	male	female
pneumonia	146	73	73	96	46	50	120	73	47	9	3	6
bronchitis	16	2	14	11	5	6	9	4	5	0	0	0
cystitis	76	21	55	31	16	15	42	16	26	0	0	0
pyelonephritis	11	2	9	28	6	22	14	2	12	2	1	1
skin-soft tissue	42	24	18	25	18	7	21	11	10	1	1	0
bone-joint	7	3	4	1	1	0	2	1	1	0	0	0

Table 1: Most frequent infection sites in patients admitted with community-acquired infection

Microorganism	Infection without SIRS	Sepsis	Severe sepsis	Septic shock
Gram - positive				
Streptococcus pneumoniae	12	9	7	2
Staphylococcus aureus	25	19	25	2
Gram - negative				
Escherichia coli	46	44	37	3
ESBL	1	0	2	0
Klebsiella spp.	12	8	7	0
Haemophilus spp.	16	9	10	1

Table 2: Most frequent pathogens in patients admitted with community-acquired infection