

1^{er} Congrès Franco-Tunisiens de Gériatrie
1^{er} Congrès National de la Société Tunisienne de Gériatrie
3^{ème} journées de Gériatrie du Sud

Urinary tract infections in the elderly: what particularities?

Asma Ben Mabrouk, Hela Sakly, Wafa Marrakchi, Ikbel Kooli, Adnene Toumi, Chawki Loussaief, Abir Aouam, Hajer Ben Brahim, Mohamed Chakroun
Infectious diseases department, UR12SP41, Monastir University Hospital

Introduction:

The urinary tract infection (UTI) is a very common pathology in elderly. Its management depends on multiple factors and treatment duration ranges from few days to 3 weeks [1].

Aim of the study:

The aim of this study is to precise the particularities of this pathology within older people.

Material and methods:

- It's a retrospective study including all patients hospitalised in the infectious diseases department for UTI in a period of 3 years between January the 1st 2015 and December the 31st 2017.
- Inclusion criteria were lower urinary tract symptoms with or without fever associated with significant leucocyturia.
- The patients were divided in two groups: patients more than 65 years old in group1 and patients 65 years old or less in group 2.

Results:

- Total= 142 patients.
- Age= 54.7 +/- 18 years.
- Sex ratio= 0.61.

	Group 1	Group 2	p value
Diabetes	N=36 (70.6%)	N=32 (35%)	p < 0.001
Lower urinary tract symptoms	N=42 (82.4%)	N=71 (78%)	p= 0.54
Fever	N=36 (70.6%)	N=84 (92.3%)	p= 0.001
Lumbar pain	N=24 (47.1%)	N=65 (71.4%)	p=0.004
Bacterial documentation	N=30 (58.8%)	N=54 (59.3%)	p= 0.95
Multi-drug resistant bacteria	N=18 (60%)	N=17 (31.5%)	p= 0.01
mean duration of hospital stay (days)	13.36 +/- 5.48	11.08 +/- 5.47	p= 0.02

Table 1: Univariate analysis of the two groups.

- The infection was documented in 84 cases (59.2 %), with no statistical difference between the two groups.
- **Enterobacteriaceae** were isolated in 79 samples (94%). The main uropathogen isolated was **Escherichia coli** in 57 cases (67.9 %).
- Multi-drug resistant bacteria were isolated in 35 cases (41.7 %), more common in group 1

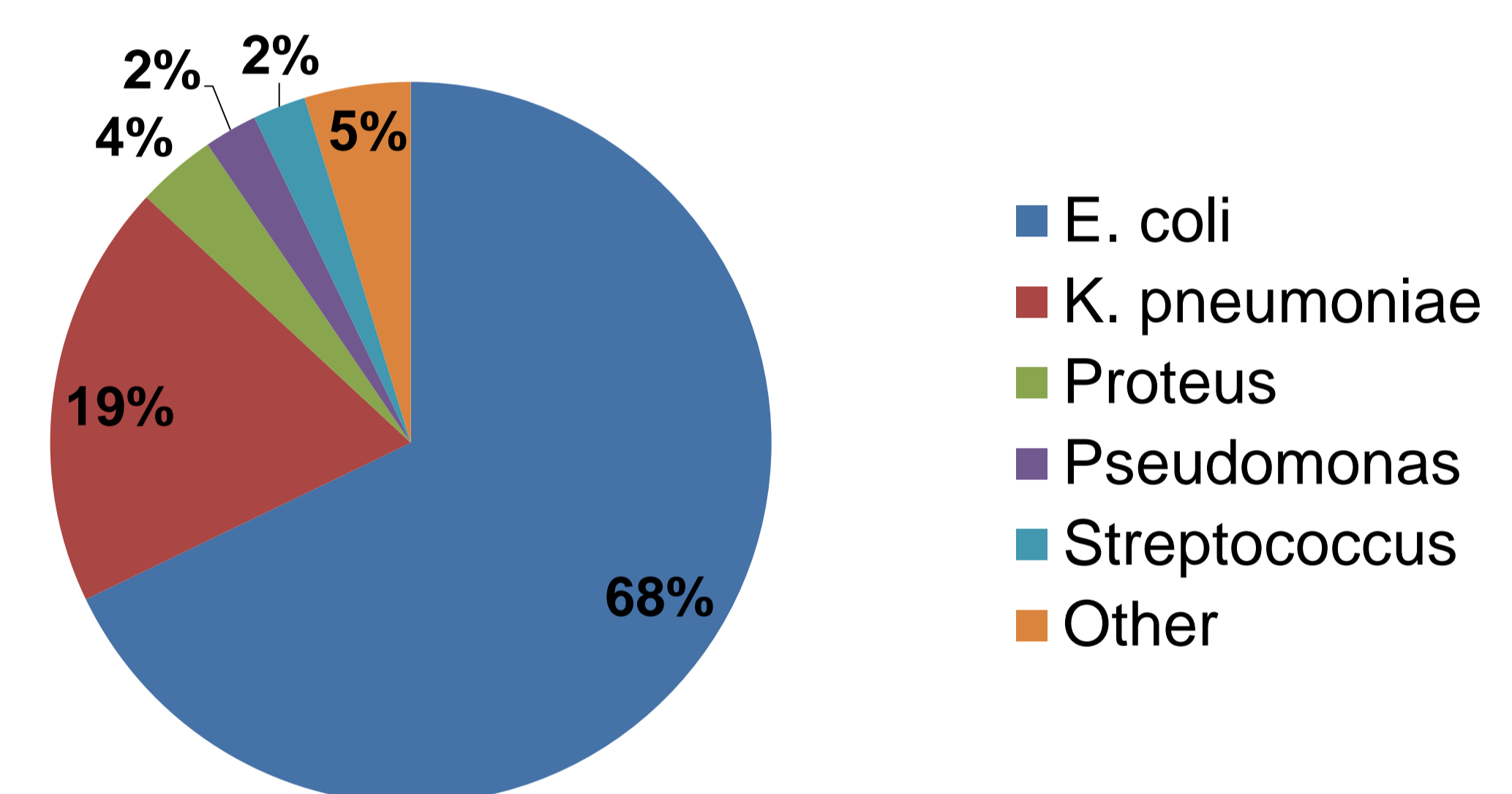


Figure 1: Distribution of bacteria isolated

Discussion and conclusion:

- The UTI could be difficult to diagnose in the elderly. Our study showed that fever and lumbar pain are significantly less present when older people are infected. So the diagnosis shouldn't be dismissed if these signs are missing [2].
- Multi-drug resistant bacteria are more frequently isolated in the elderly which could be explained the iatrogenesis and the underlying conditions exposing them to long hospitalizations in health care facilities and antibiotic use.
- Hospital stay should be as reduced as possible to limit healthcare associated infections and psychological impact.

1. Nicolle LE. Urinary tract infections in the elderly. Clin Geriatr Med [Internet]. 2009 Aug [cited 2019 Oct 14];25(3):423–36. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/19765490>
2. Woodford HJ. Diagnosing urinary tract infection in older people. J Infect [Internet]. 2019 Apr 1 [cited 2019 Oct 14];78(4):323–37. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/30658079>