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Abstract

The management of recurrent acute prostatitis is a challenge for healthcare. 2 to 10% of men will present acute prostatitis throughout their lives. Identified in approximately 2 to 16.5% of prostate biopsies, by needle. It is believed that about 50% of men with a high-grade PIN on biopsy, will present a carcinoma on subsequent biopsies performed within the first 2 years of follow-up (follow-up is recommended every 3 to 6 months for the first two years and every year thereafter) [1].

AIM

To identify the factors associated with the cure, stability or worsening of acute prostatitis over 10 years of follow-up in a standard Health Area.

Methods and Materials

Prospective study of 296 men over 18 years of age treated for acute prostatitis from 01/01/2012 to 10/01/2022.Groups according to the evolution in health-related quality of life (prostatitis) measured with SF-36. G1 (improvement, n=216): patients with acute prostatitis who have improved, G2 (remain the same, n=51): patients with acute prostatitis who remain the same, with the same complaints. G3 (worsening, n=15). Fourteen deaths from other causes were excluded from the analysis.

Variables: Age, year of admission, days of hospital stay, hospital medical specialty, urine culture results, concomitant diseases, concomitant treatments, toxic habits (smoking, alcoholism), surgical history, allergies.

The analysis was performed using the automatic statistical software IBM SPSS Statistics for Windows, Version 25.0.

Statistical significance was accepted for p<0.05.

Table 1. Multivariate analysis in the general sample

Variables	B coefficient beta	Wald Valid index	p-value: statistical significance	RR: Relative risk	95% I.C	
					Lower	Upper
Age	-0,026	5,228	0,022	0,974	0,953	0,996
Year 2012 (yes)	-1,447	4,826	0,028	0,235	0,065	0,856
Year 2013 (yes)	-1,466	6,008	0,014	0,231	0,071	0,745
Year 2014 (yes)	-1,427	5,666	0,017	0,240	0,074	0,777
Year 2016 (yes)	-2,398	9,793	0,002	0,091	0,020	0,408
Year 2017 (yes)	-2,015	7,987	0,005	0,133	0,033	0,539
Year 2019 (yes)	-1,595	6,446	0,011	0,203	0,059	0,695
Year 2020 (yes)	-3,045	7,243	0,007	0,048	0,005	0,437
Year 2021 (yes)	-1,671	8,596	0,003	0,188	0,062	0,575
Hyperlipidem ia and Lipidemia (yes)	1,036	4,526	0,033	2,818	1,085	7,321
High blood pressure (yes)	1,217	5,699	0,017	3,377	1,243	9,173
Urinary tract surgical complicatio s (yes)	2,411	4,579	0,032	11,141	1,225	101,345
Other urinary problems (yes)	2,100	5,801	0,016	8,167	1,479	45,102
Heart failure (yes)	2,518	3,981	0,046	12,406	1,046	147,189
Analgesic allergy status (yes)	2,075	4,352	0,037	7,962	1,134	55,912

Results

Mean age 61.68 years, SD 12.27 (24-91), without differences (p=0.2285).

Income:

Year according to improvement/stability/worsening=

2012:17/04/00; 2013:05/26/03; 2014:25/05/03; 2015:09/06/03; 2016:00/22/00; 2017:03/20/00; 2018:06/13/00, 2019:07/23/00; 2020:01/14/00; 2021:39/06/00; 2022:08/06/06.

Mean hospital stay was 4.92 SD 0.68 (1-71) without differences.

Multivariate analysis: There was more healing at an older age, years 2016, 2017, less hyperlipidemia, hypertension, urinary tract complications. Prostatitis symptoms remained stable in smokers, with diabetes and hypertension, and urine and semen cultures positive for Enterococcus. Acute prostatitis worsened with positive cultures for E coli, hyperlipidemia, smoking, urinary tract complications, renal failure, in 2013 and 2014.

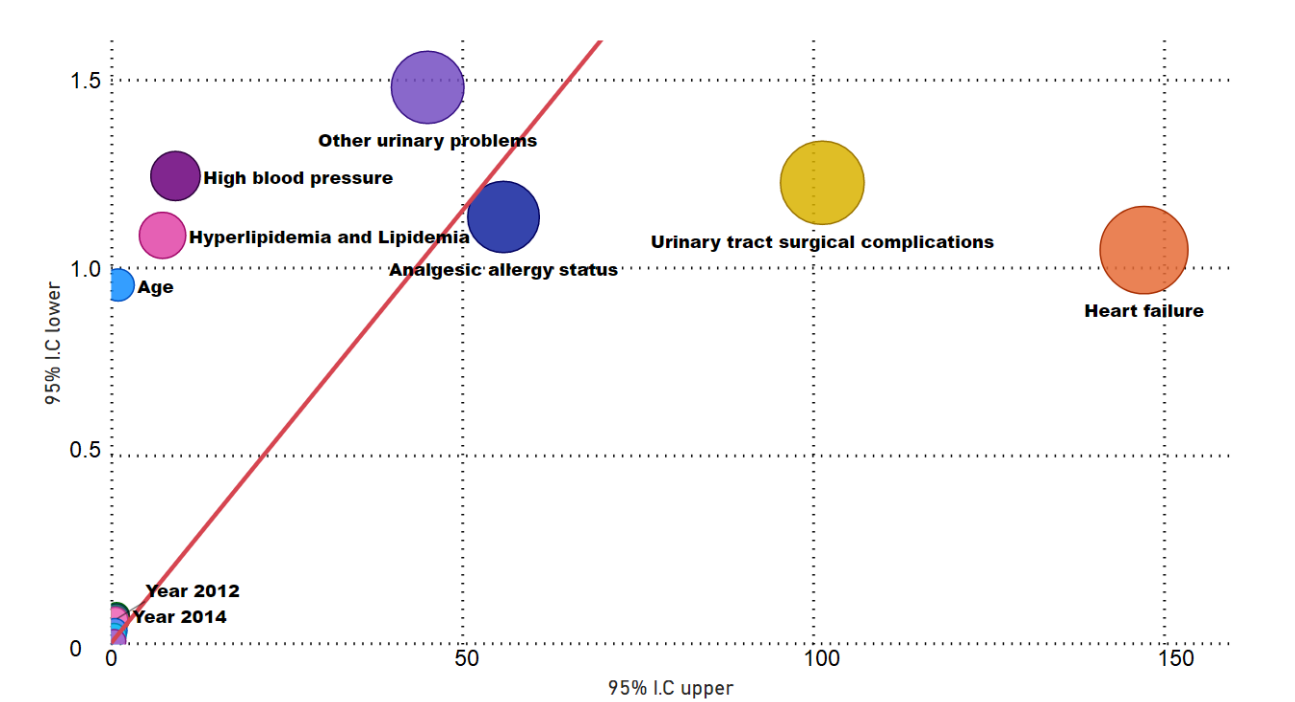


Chart 1. Logistic regression: relation between improve prostatitis evolution and the studied variables

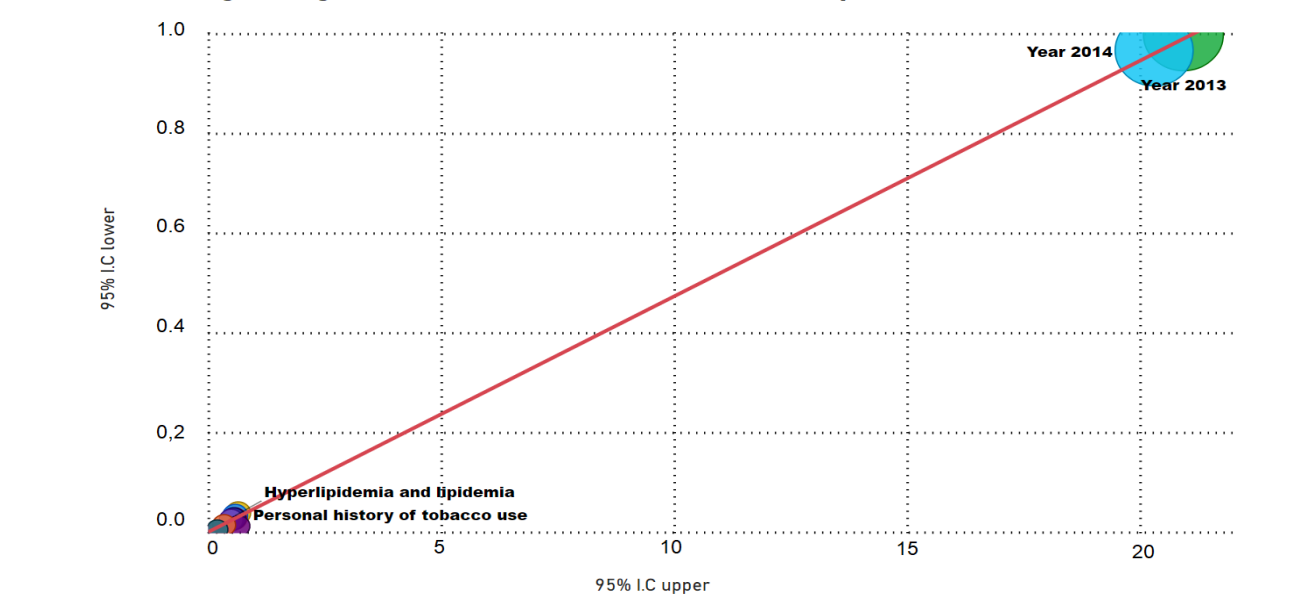


Chart 2. Logistic regression: relation between worsening prostatitis evolution and the studied variables

Interpretation of results

In older age, less hyperlipidemia, hypertension, urinary tract complications related with prostatitis symptoms remained stable in smokers, with diabetes and hypertension, and urine and semen cultures positive for Enterococcus. Acute prostatitis worsened with positive cultures hyperlipidemia, smoking, urinary tract complications, renal failure, in 2013 and 2014.

Conclusions

Acute prostatitis has a worse prognosis in patients with smoking, positive cultures for Escherichia coli, urinary tract complications, and renal failure. They improve correlated with older patients. They remain stable in patients with diabetics, hypertensive patients, and with positive findings cultures for Enterococcus.

References

1. Montironi, R., et al., Morphological identification of the pattern of prostatic intraepithelial neoplasia and theirimportance. . J Clin Pathol 2000. 53: p. 655- 665.