

Increasing trend in admission rates and costs for acute diverticulitis during 2005-2015: real-life data from the Abruzzo Region.

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Background

Acute diverticulitis is a serious medical condition that frequently leads to hospitalizations with a significant health care burden. Scarce data are available on the epidemiological trend of diverticulitis and its financial burden in Italy.

Objective

To explore a potential variation in the rate and costs of hospital admission for uncomplicated and complicated diverticulitis over the last decade.

Methods

We performed a retrospective analysis using the hospital discharge data of the Abruzzo Region (~1,300,000 inhabitants) from 2005 to 2015. We included patients 20 years and older, resident in the Region, who were admitted in any Italian hospital with diverticulitis (ICD9 codes 562.11, 562.13 in the primary diagnosis field, or in secondary diagnoses fields if the main diagnosis was related to diverticulitis). Joinpoint regression and generalized linear models were used to detect the changes in annual hospital admission prevalence rates and the average percentage annual costs over the study period. Costs were derived from the official DRG tariff and expressed in 2015 euros adjusted for inflation.

Results

From 2005 to 2015, the age-standardized hospitalization rate per 100,000 persons for acute diverticulitis increased from 38.9 to 42.2, equivalent to 1.4% annual increase - APC ($p=0.041$). The admission rate for complicated diverticulitis increased from 5.9 to 12.5 (APC: +8.4%; $p<0.001$), while the admissions for uncomplicated disease slightly decreased (from 32.9 to 29.7; APC: -0.6). Among the patients aged 50 years or less, the admission rate of both complicated and uncomplicated diverticulitis sharply increased (APC: +7.9% and +16.9%, respectively; both $p<0.001$).

The average hospital costs per patient with complicated diverticulitis increased from €3,697 to €6,945 (APC +4.1%; $p<0.001$). These costs were more than 3 times higher than those of the uncomplicated patients.

Conclusion

During the last decade, in the Abruzzo Region the hospital admission rates for diverticulitis and their costs increased significantly, mainly due to disease complications. Further analyses are required to evaluate whether this trend was common among the Italian Region.