EPIDEMIOLOGY AND TREATMENT OF MICROSCOPIC COLITIS – REAL WORLD EVIDENCE FROM THE CZECH REPUBLIC

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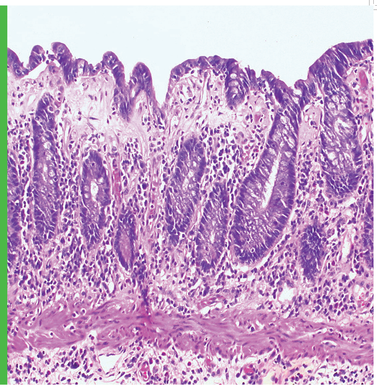

Objectives

Microscopic colitis is an inflammatory disease of the colon with chronic watery diarrhea but normal colonoscopy findings. The aim of the analysis was to describe epidemiology, treatments and costs of microscopic colitis in the Czech Republic. The analysis was based on patient-level data obtained from General Health Insurance Company (VZP). Approximately 60% of the Czech population is insured by VZP. [1].

Methods

Real world data were obtained for years 2009-2016 for patients diagnosed with other specified noninfective gastroenteritis and colitis (diagnosis K52.8 according to ICD). Data included information on prescriptions and interventions. The analyses were performed in MS SQL and MS Excel. Total, newly diagnosed and cumulative number of patients with diagnosis K52.8 was calculated on yearly basis. The number of new cases was monitored in each year, patient was flagged as new in the year he or she was diagnosed for the first time. At the same time, the cumulative number of patients who had been counted from the moment of the first diagnosis until the last activity in the system (any diagnosis, intervention, or prescription). Diagnosed patients were further split by demographic characteristics and medicines used. The analyses are based on data from 2011 to 2015.

Results

Based on the data there are approximately 12 000 patients with diagnosis K52.8 insured by VZP indicating prevalence 204 per 100 000. 4 000 patients are newly diagnosed every year resulting in incidence of 71 per 100 000 per year. Overview of patients insured by VZP with diagnosis K52.8 is shown in Figure 1.

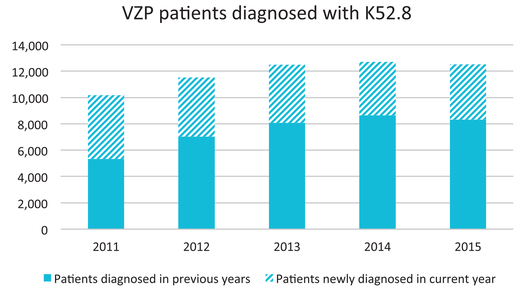

Figure 1: Number of patients insured by VZP with diagnosis K52.8 from 2011 to 2015

According to our dataset K52.8 is more common in women. Approximately 55% of diagnosed patients were female (depicted in Figure 2). The ratio is stable over time.

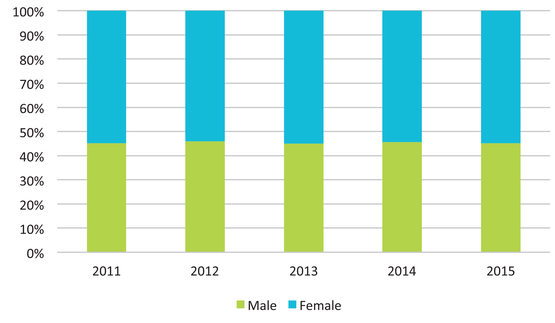

Figure 2: Sex distribution of newly diagnosed patients from 2011 to 2015

The average age of newly diagnosed patients was 38.9 years and share of adults was 82% in 2015. Conditional age average for newly diagnosed adult patients was 51.4 years. The age structure was stable over time. Figure 3 indicates higher incidence among children and elderly people, incidence seems to be relatively lower in middle-age groups.

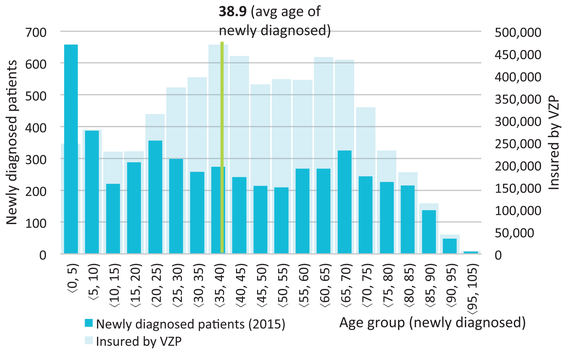

Figure 3: Age distribution of newly diagnosed patients vs. age groups in general population

According to collected data there were 53% of patients with no medication in 2015 and ratio of treated vs. untreated patients was stable over time. Among treated patients the most common medications included methylprednisolone (30%), mesalazine (26%), prednisone (21%), azathioprine (7%) and budesonide (5%) as shown in Figure 4.

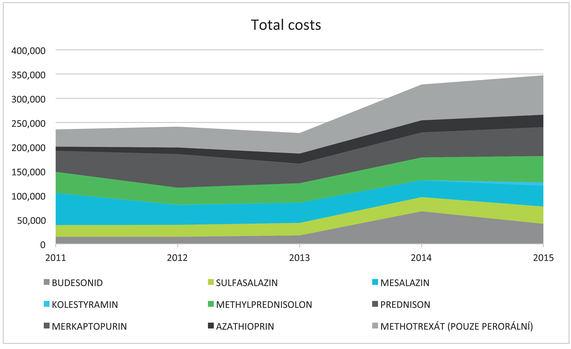

Figure 4: Treatment costs from 2011 to 2015

Treatment costs reached 350 000 CZK (13 500 EUR) in 2015. Treatment costs have been increasing over the time.

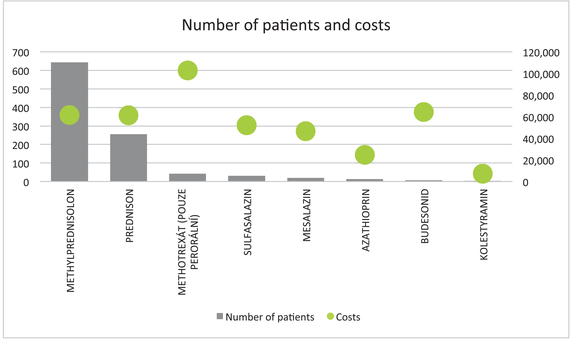

Figure 5: Number of patients and costs of K52.8 treatment (CZK)

Conclusion

It is evident that there is a relatively large group of patients that suffer from this disease. Total costs and average costs are rather low as there is no novel treatment available. As the ICD classification is rather wide, it is not possible to evaluate microscopic colitis and eosinophilic gastritis/gastroenteritis separately.

References

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[3] O. Bonderup, T. Wigh, G. Nielsen, L. Pedersen and M. Fenger-Grøn, "The epidemiology of microscopic colitis: a 10-year pathology-based nationwide Danish cohort study," Scandinavian Journal of Gastroenterology, vol. 50, no. 4, p. 393–398, 2015.