

Incidence of sigmoid diverticulitis is decreasing, or was it an epidemic?

Tryggvi Stefansson (1,2) and Bjarki Þór Alexandersson (3)
 1) The Department of Surgery, The National University Hospital of Iceland.
 2) The Department of Gastroenterology, The National University Hospital of Iceland.

Conclusion

It looks like we have had an epidemic of sigmoid diverticulitis in Iceland. It is probably due to changes in lifestyle. Smoking could be an important riskfactor for diverticulitis.



Aim

To analyse the incidence of sigmoid diverticulitis in Iceland 1985-2014

Method

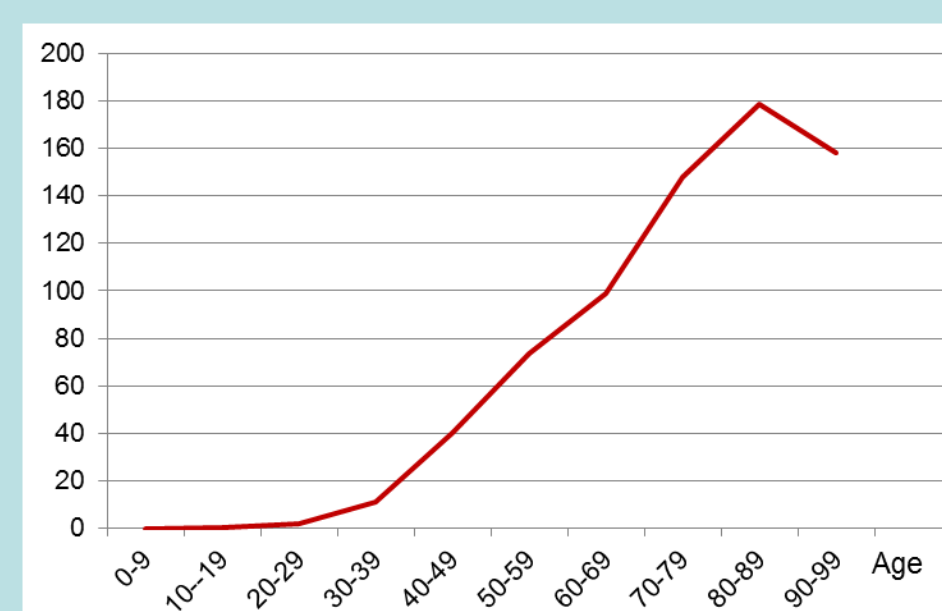
All patients discharged from The National University Hospital of Iceland in Reykjavik and from Akureyri Hospital in northern Iceland, with the diagnoses (ICD 9: 562.1-2 and ICD 10 K57.2-9) during 1985 to 2014 were included. Those who had the diagnosis as the first diagnosis or if the diagnosis was coupled to a resection of the left colon or sigmoid colon were classified as diverticulitis. Chi-square trend test was used to analyse the decrease in incidence from 1995 to 2014.

Results

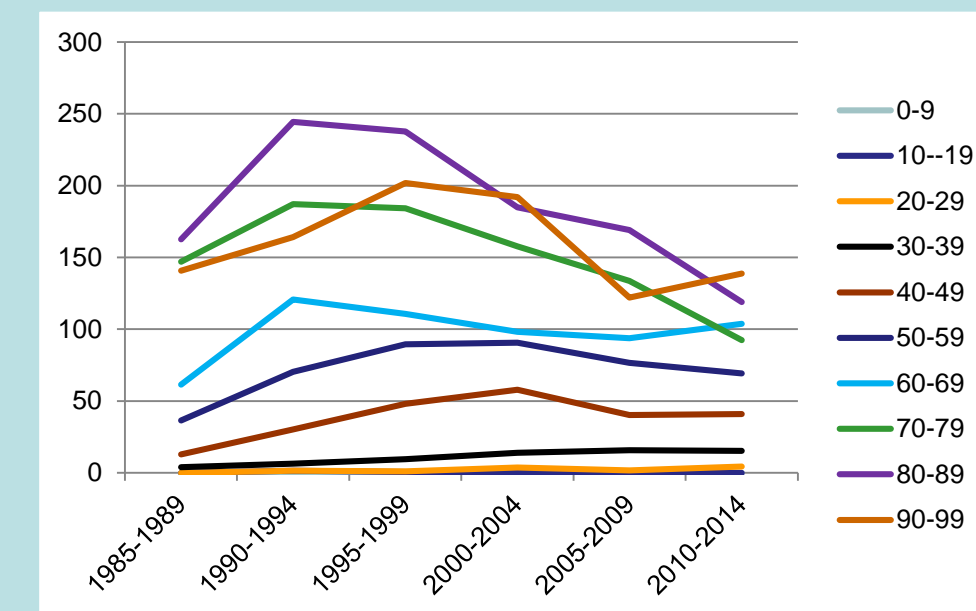
Number of patients classified as diverticulitis admitted to hospital in Iceland 1985-2014, according to sex and agegroups. Number of operations in parenthesis.

age	< 40	40 – 89	≥ 90	Total
Women	47(5)	1616(321)	43(8)	1706(334)
Men	122(12)	1109(200)	12(2)	1243(214)
Total	169(17)	2725(521)	55(10)	2949(548)

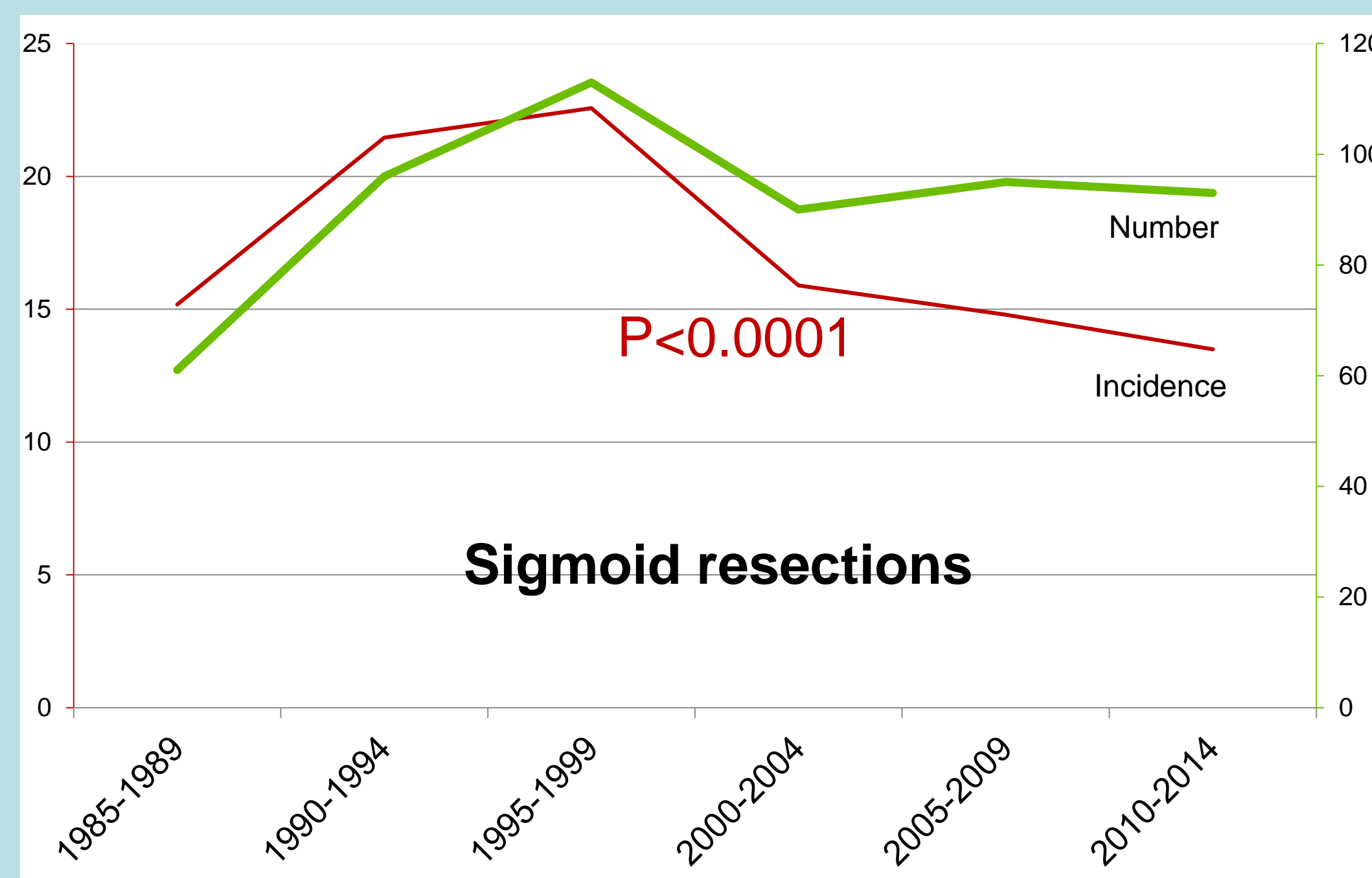
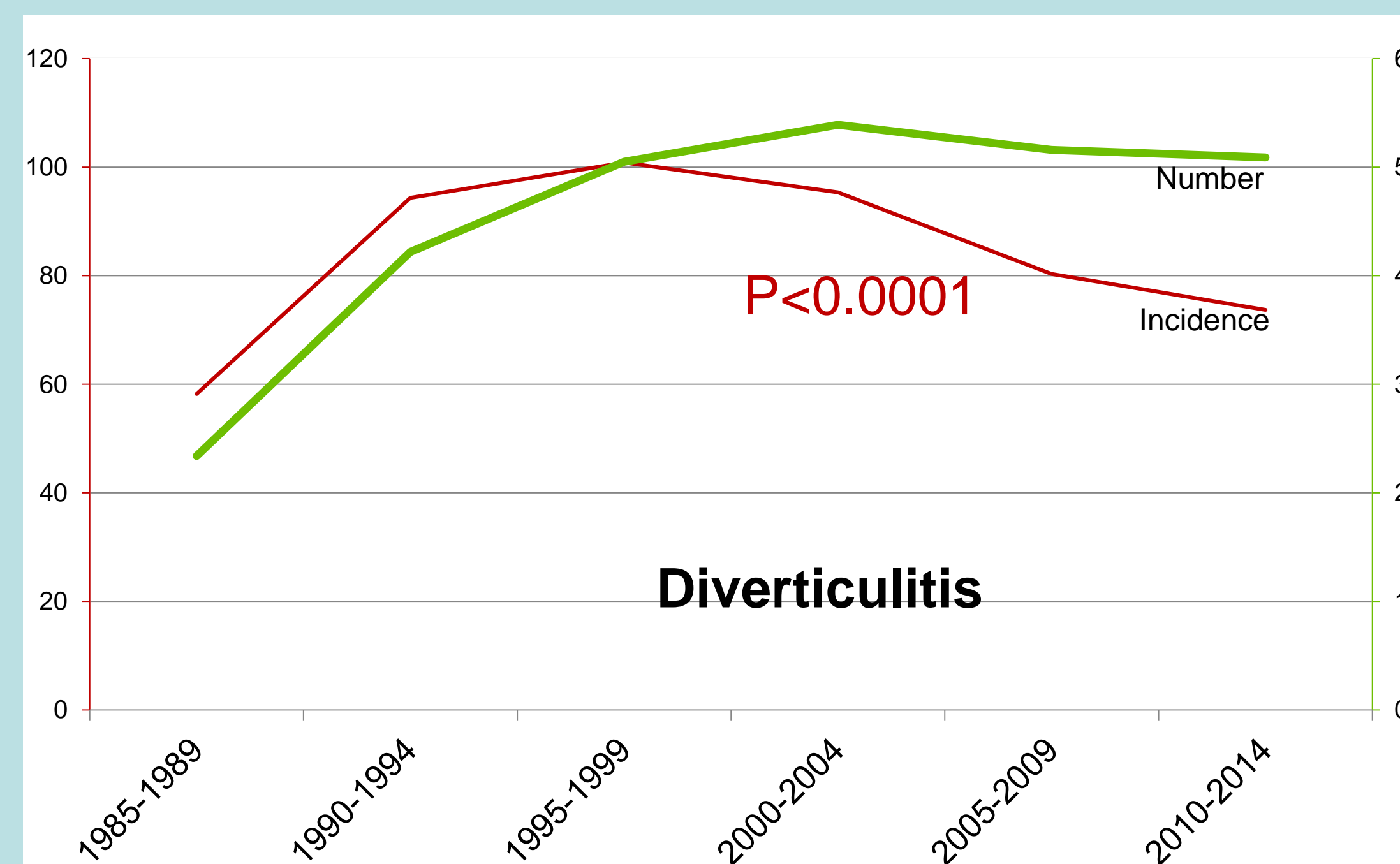
Age related incidence for diverticulitis in Iceland 1985-2014.



Incidence changes in 10-year age groups



Number and incidence of admissions due to sigmoid diverticulitis and number and incidence of resections for sigmoid diverticulitis in age group 40 – 89 years and in 5-year periods. There is a sharp reduction of the incidence of sigmoid diverticulitis from 1995.



Discussion

The incidence of sigmoid diverticulitis in Iceland has declined sharply from 1995. Resections for diverticulitis follow the same trend. Number of patients is still high due to larger age groups over 60 years. The study is a population-based national study. Migration is little to and from Iceland that makes the country suitable for epidemiological studies. During World War II the Icelanders began smoking cigarettes. In the 60s more than 60% of the adult population in Iceland smoked. Since then, smoking has fallen continuously and now 11% of the 329,000 Icelanders smoke. Smoking is a known risk factor for diverticulitis and may have contributed to an epidemic of diverticulitis in Iceland.



Tryggvi Stefansson
tryggvi@simnet.is