Prevalence and health-care costs of perianal fistula in Crohn’s Disease

A nationwide cohort study

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Background

• Data on the prevalence of perianal fistulas in Crohn’s disease (pCF) and associated health-care costs remain sparse

• This study aimed to determine the prevalence of pCF in a nationwide cohort. Secondary outcomes included use of biologicals, number of surgical interventions and direct health-care costs related to pCF.
Methods

- All patients registered in the Danish National Patient Registry as having Crohn’s disease (CD) between 2010-2016

- pCF-population identified by specific pCF diagnosis or surgical procedure

- Data on in- and out-patient services were retrieved from the National Patient Registry

- Data were linked with the Danish Case Mix System in order to assign costs to outpatient and inpatient services in pCF cases.
Results

• A total of 17,789 CD patients were identified

• 1,773 (10%) patients were identified with an incident pCF in the study period

• The number of incident pCF decreased from 303 cases in 2010 to 144 cases in 2016.

• The prevalence of pCF ranged from 612-544 (5.1-3.1 patients per 100 patients) during the study period.
Results

• Biological treatment was administered to 46.9% of the patients of whom 25.9% were in biological treatment prior to the diagnosis of pCF.

• In total, 35% were subjected to surgical intervention. Mean number of pCF-related surgical procedures per year was 1,4 per patient.

• Mean cost from 2010-2015 was 21,708€ per patient (IQR: 2,501€-28,930€)

• In 2016 the total hospital-associated costs for pCF was 2.3 million €, with biologicals being the major expenditure (911,200€) followed by surgical interventions (723,600€).

• Health-care costs for treatment of pCF decreased during the study period mainly due to lowered prices on biologicals.
Conclusions

• In a Danish nationwide cohort of patients with CD the prevalence of perianal fistulas decreased in the period from 2010-2016. The reason for this needs further elucidation.

• Only half of the incident cases received biologicals, yet biological treatment was the main expenditure for the entire study population.

• Health-care costs for pCF decreased during the study period, but are still high compared with non-pCF IBD patients.