Su1300

Healthcare Expenditures for Inflammatory Bowel Disease Peak in Patients With a Short Disease Duration

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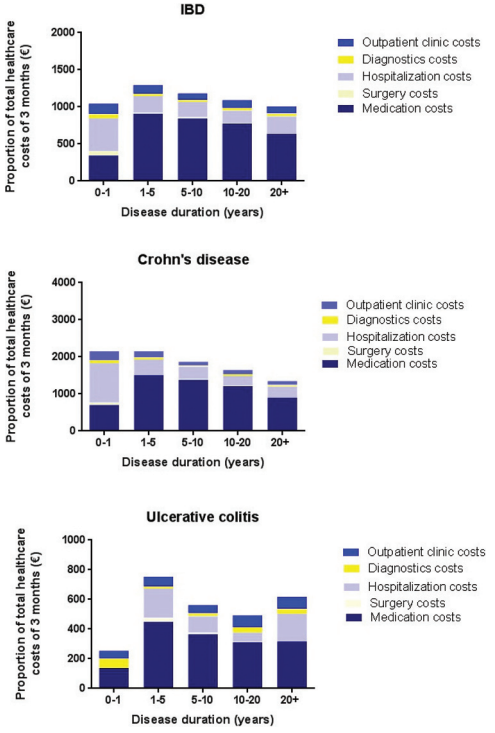
Purpose: We aimed to study whether disease duration influences the healthcare costs in inflammatory bowel disease (IBD) patients in a large cohort. **Methods:** A large number of IBD patients from academic and non-academic hospitals were prospectively followed for two years (the COIN- study). At baseline, the disease duration of all patients was calculated. Used healthcare resources, disease activity and quality of life were assessed using three-monthly questionnaires. Healthcare resources were multiplied by their unit prices to obtain costs. These parameters were cross-sectionally compared between patients with a short (0-1 yr), median (1-5 yrs), long (5-10 years) and extended (10-20 yrs and >20 years) disease duration at baseline. **Results:** A total of 3,030 patients (1,558 Crohn's disease (CD), 1,054 ulcerative colitis (UC) and 418 IBD-unspecified) were enrolled in the study. Fifty-six patients had a disease duration of 0-1 years, 502 of 1-5 years, 569 of 5-10 years, 899 of 10-20 years and 998 of over 20 years. The proportion of patients with active disease gradually decreased over time, being 30.4% in IBD patients with a short disease duration, and 13.2% in those with an extended (>20 yrs) disease duration (CD: from 36.0% to11.8%; UC: from 21.1% to 16.5%). The total IBD healthcare costs peaked at 1-5 years of disease duration, which was mainly due to a high number of TNF-α inhibitor users (CD: 30.7% vs. 17.7% after 20 years; UC: 5.7% vs. 3.4% after 20 years). In patients with a longer disease duration, total healthcare costs were lower than in the first years after diagnosis. In CD, healthcare costs after the first year following the diagnosis shifted from hospitalizations to medication costs (TNF-α- inhibitors). Hereafter, medication costs remained the major driver of total healthcare costs. In UC, total healthcare costs decreased over time, but increased again in patients with a disease duration of 20yrs or more, due to an increase of hospitalizations. The quality of life was lowest in patient shortly after diagnosis of IBD and increased gradually in both CD and UC patients with a longer disease duration (median IBD- questionnaire: CD from 175 to 179; UC from 179 to 190). **Conclusions:** The healthcare costs of IBD peak in patients with a short disease duration. The quality of life is higher in patients with a longer disease duration.



Distribution of healthcare costs over time

Su1301

Incidence and Phenotype of Inflammatory Bowel Disease From 2012-2013 Across 9 Countries in Asia: Results From the 2012 Access Inception Cohort

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Background: The incidence of inflammatory bowel disease (IBD) in Asia was first reported in the 2011 ACCESS inception cohort. This study aims to validate the incidence reported in 2011 by including a second independent cohort from 8 of the participating countries in 2011 and Brunei to investigate the incidence of IBD in Asia in 2012. **Methods:** Incident IBD cases diagnosed between April 1, 2012 and March 31, 2013 from 18 centres, 11 cities and 9 countries in Asia were enrolled. Data including demographics and disease phenotype were entered into a Web-based database (http://www.access-apibd.com/access/index.html). Disease location and behavior were classified according to the Montreal classification. **Results:** A total of 325 IBD patients were identified including 189 (58%) ulcerative colitis (UC), 119 (37%) Crohn's disease (CD), and 17 (5%) indeterminate colitis (IC). The crude overall annual incidence per 100,000 of IBD was 1.61 (95% confidence interval, CI, 1.44-1.79) in 2012 compared with 1.15 (95% CI, 1.25-1.51) in 2011. The highest incidence in Asia was in Guangzhou (3.86 per 100,000), Hong Kong (2.91 per 100,000) followed by Macau (2.60 per 100,000). Overall ratio of UC to CD in 2012 was similar to that of 2011 (1.57 vs. 1.69; p=0.211). There were more male than female patients in both years (59% vs 60%; p=0.773). Mean age of diagnosis was 40 years (±15.96) in 2011 and 42 years (±16.30; p=0.084) in 2012. Median time from symptom onset to diagnosis did not differ between 2011 (6 months, IQR 3-24) and 2012 (7 months, IQR 2-16; p=0.958). Disease behavior (B1: 72.0%, B2: 9.9%, B3: 4.4%, perianal: 13.2%), disease location for CD (L1: 25.3%, L2: 25.3%, L3: 49.5%) and UC (E1: 30.9%, E2: 40.1%, E3: 28.9%) were similar to that of previous year. Most CD patients were non-smokers (80.3%) whereas 9.9% were current smokers and 9.9% were ex-smokers. **Conclusion:** The incidence of IBD, UC to CD ratio and age of disease onset in the ACCESS 2012 cohort was not significantly different from that reported in the 2011 cohort. Incidence remains highest in East Asian countries. Disease phenotype was also similar over 2 years. The ACCESS inception cohort reflects the true incidence of IBD in Asia.

Table 1. Crude annual incidence of inflammatory bowel disease in Asia

Country	Crude annual incidence (per 100,000 persons)			
	IBD	CD	UC	IC
Mainland China (Guangzhou)	3.86	1.50	2.36	0
Hong Kong	2.94	1.28	1.44	0.22
Macau	2.60	1.00	0.80	0.80
Mainland China (Daqing)	2.01	0.15	1.86	0
Singapore	1.35	0.50	0.77	0.08
Sri Lanka	1.27	0.27	0.86	0.14
Brunei	0.73	0.49	0.24	0
Malaysia	0.71	0.12	0.59	0
Indonesia	0.66	0.22	0.22	0.22
Thailand (Bangkok)	0.63	0.33	0.30	0
Thailand (Chiengmai)	0.48	0.24	0.24	0

Su1302

Comparison of Disease Phenotype in 35,128 European and 4,686 Non-European Inflammatory Bowel Disease Cohort of the IIBDGC

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Introduction: Inflammatory bowel disease (IBD) is relatively common in the West and is increasing in non-Western countries. Comparative data on clinical phenotype of IBD between European and non-European populations are scarce. We have recently characterised the genetic architecture of IBD in European and non-European populations through the International IBD Genetics Consortium (IIBDGC) cohorts. We now describe the detailed distribution of clinical sub-phenotypes across these populations. **Methods:** Detailed sub-phenotpye data were collected on standardised proforma after retrospective case-note review by trained physicians or assistants at each site. Patient demographics and sub-phenotypes were compared between patients of European (n=35,128) versus non-European descent (East Asian, Indian, Iranian; n=4,868; resident at country of birth at time of diagnosis), recruited from hospital and population-based cohorts. **Results**: IBD cases had a lower prevalence of a family history of IBD (5.6% vs.28.3%; $p=4.78X10^{-85}$) in non-European than Europeans. ***Crohn's disease (CD):*** Whilst the age at diagnosis of CD was similar across populations (19,290 European CD, 1,991 non-European CD), there was a striking male predominance (67.1% vs.45.1%; $p=7.09X10^{-78}$) in non-Europeans. In CD, there were significantly more active smokers in Europeans than non-Europeans. CD location was broadly similar with the exception of upper gastrointestinal disease which was more common in Europeans (12.7% vs. 7.3%; $p=8.69X10^{-10}$). While stricturing (43% vs.27.6%; $p=2.73X10^{-33}$) and perianal diseases (42.1% vs.27.8%; $p=5.35X10^{-33}$) were more prevalent in non-Europeans than Europeans, surgical rates for CD were lower in non-Europeans (48.1% vs.52.8%; $p=5.42X10^{-4}$). ***Ulcerative colitis (UC):*** There were very few non-European ex-smokers with UC compared with European patients (1.9% vs.28.7%). Extensive colitis (34.2% vs.48.8%; $p=1.52X10^{-34}$) and colectomy for UC (4.1% vs.18.5%; $p=1.22X10^{-69}$) were also less common in non-Europeans. In multi-variable analysis, independent factors for colectomy in UC were extensive colitis (OR 10.35; 95% CI, 7.85-13.64), European origin (OR 4.71; 95% CI, 3.72-5.96) and ex-smoking (OR 1.2; 95% CI, 1.08-1.36). **Conclusion:** In the largest dataset comparing IBD sub-phenotype in European and non-European patients, there are several striking demographic differences in non-Europeans (male predominance in CD; less ex-smokers developing UC) which may yield clues to the role of environmental factors in disease etiology. Major disease sub-phenotypes (location, behavior and surgery) are broadly similar. CD phenotype appears to be as severe, if not more severe, in Asia than in the West. Differences in disease phenotype may relate to delayed diagnosis or late presentation in Asians or real disease differences due to underlying genetics and microbial factors.