



# Presentations of abdominal pain in Australian general practice

AIHW General Practice Statistics and Classification Unit, University of Sydney, New South Wales.

The BEACH program, a continuous national study of general practice activity in Australia, gives us an overview of the consultations in general practice involving a patient presentation of abdominal pain. This provides a backdrop against which the articles in this issue of the *Australian Family Physician* can be further considered.

## Rate of presentation

Of the 602 100 encounters recorded by 6021 general practitioners in BEACH between April 1998 and March 2004, there were 12 194 at which the patient gave abdominal pain as one of their reasons for encounter (RFE) (*Figure 1*). These patients presented at a rate of 2.1 per 100 encounters (about 2 million Australian occasions per year). At 48.2% of these encounters abdominal pain was the only RFE.

## Patients

Patients presenting with abdominal pain were more likely to be female (66.3%) and younger than average for all encounters. The age and sex specific rates of presentation show that women were far more likely to present with abdominal pain (2.3 per 100 encounters) than men (1.7 per 100). Children aged less than 5 years were the most likely to present with abdominal pain (4.1 per 100) with the rate steadily decreasing with age (*Figure 1*).

## Problems managed

There were 18 267 problems managed at 'abdominal pain' encounters. Of these, 10 007 (54.8%) were associated with the RFE of abdominal pain. At 24% of these encounters, the GP was unable to make a diagnosis; recording the problem only in symptomatic terms. Gastroenteritis was a common diagnosis (11.3%), followed by irritable bowel syndrome (5.3%), constipation (4.9%), and urinary tract infection (4.7%) (*Figure 1*). Abdominal pain was less frequently diagnosed

as peptic ulcer (2.5%), appendicitis (2.1%), and rarely as malignant neoplasm (0.6%), urinary calculus (0.4%) or ectopic pregnancy (0.1%).

The problem label 'abdominal pain' was most common in all age groups (*Figure 2*). However, viral disease and constipation were more often diagnosed in children than adults. Diverticular disease was occasionally diagnosed in young adults but steadily increased with patient age (13.8% of abdominal pain encounters with patients aged 65 years and over). Gastroenteritis was often diagnosed in patients aged less than 25 years and became less common with increasing age. Cholecystitis/cholelithiasis was most likely in patients aged 45–64 years, while irritable bowel syndrome did not demonstrate wide variation in frequency across age groups. While appendicitis was only diagnosed at 2.1% of encounters, it was far more common in children (4.2%) and young adults (4.4%).

## Management

The most problematic group for GPs is patients for whom the symptom remains undiagnosed at the end of the encounter. Management of these patients is described in *Figure 1*. Of the 2951 problems that remained undiagnosed, over half (53.2%) were new presentations of abdominal pain.

## Medications

For more than two-thirds of these problems (68.4%) the GP did not prescribe, supply or advise any medication. For the remainder,

there were 1114 medications of which two-thirds were prescribed. The medication rate was 37.7 per 100 problems; far lower than the average for all problems (71.6%). Paracetamol was highest (5.7 per 100 problems), followed by hyoscyne butylbromide (5.0%).

Nonpharmacological treatments were provided at a relatively low rate. Clinical treatments (22.6 per 100 problems) were usually the provision of counselling and advice (18.5%), although a decision to observe/wait was recorded for 1.5% of these problems. Therapeutic procedures were relatively rare (4.1 per 100 problems).

## Tests and referrals

Pathology tests were ordered at double the usual rate (41.7 tests per 100 abdominal pain problems). These included full blood count (8.8 per 100), urine M&C (6.9) and liver function (5.4) tests. Orders for imaging were frequent (35 per 100 problems) – six times the average rate (5.9 per 100) – with ultrasound the most common (20.7 per 100). Referrals (4.8 per 100) were most often to specialists (9.8%) particularly gastroenterologists (4.6%).

Conflict of interest: none declared.

## Acknowledgment

The BEACH team: Helena Britt, Lisa Valenti, Graeme Miller, Clare Bayram, Janice Charles, Stephanie Knox, Joan Henderson, Yiing Pan, Anthea Ng.

AFF

## Correspondence

Email: helenab@med.usyd.edu.au

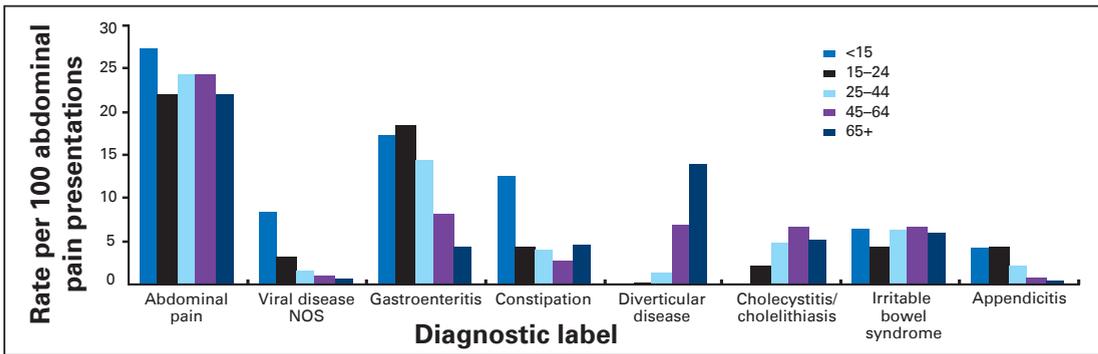


Figure 2. Rate of each diagnosis per 100 'abdominal pain' presentations by patient age group

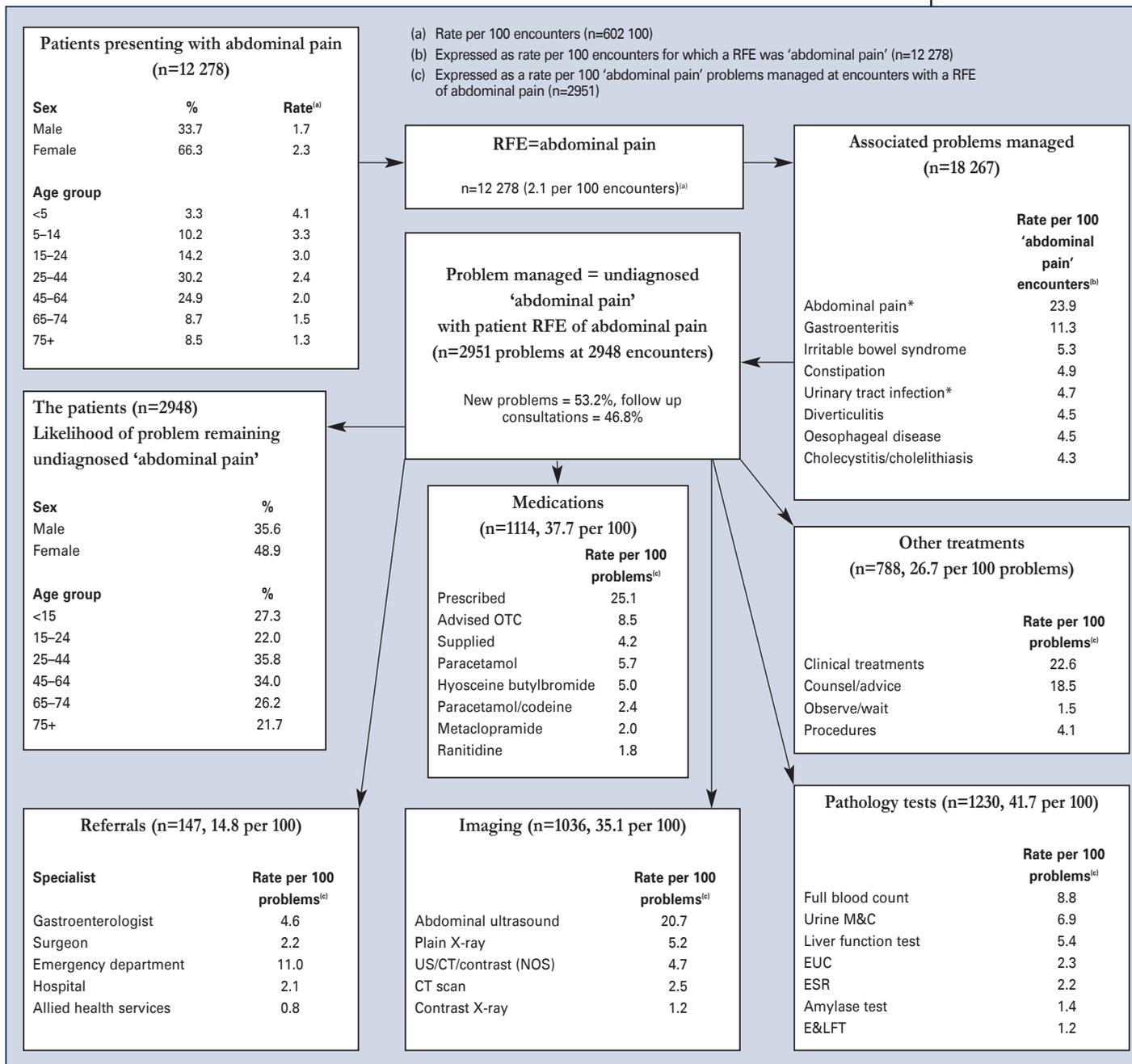


Figure 1. Presentations of abdominal pain and management of the undiagnosed problem