

Introduction:

The NHSE pilot evaluation of capsule sponge triage in patients with reflux has shown it as a cost-effective tool, reducing the need for gastroscopy. Long-term follow up on patients with negative sponges is not reported. We describe 1 and 2 year follow up of patients from the largest single UK site.

Methods:

Between November 2020 and December 2022, patients routinely referred to direct access gastroscopy or gastroenterology services with reflux were triaged to a new early diagnosis service with a nurse-led teleclinic and offered capsule sponge as part of the DELTA or NHSE pilot studies. Patients with positive tests (TFF3 and/or atypia/p53 indicating possible Barrett's/gastric intestinal metaplasia or dysplasia respectively) were excluded as follow-up gastroscopy would have been mandated. All patients had a nurse-led follow-up to assess and manage symptoms within three months. Gastroscopy was only requested for persistent or concerning symptoms. The endoscopy database was reviewed at 1 and 2-years to record any gastroscopy findings.

Results:

429 patients were reviewed at 1 year and 204 at 2-year follow up. Of the 429, 86% (n=371) had not presented for gastroscopy within 1 year of their capsule sponge. Of the 14% (n=57) who did have gastroscopy, most frequent findings were gastritis (n=14), hiatus hernia (n=9) and normal (n=16). The most significant finding was one case of gastric cancer picked up by the capsule nurse due to new concerning symptoms and referred for gastroscopy two weeks after capsule sponge. 371 gastroscopies were avoided at 1 year. Of the 204 patients who underwent capsule sponge and were followed up at 2 years, 92% (n=187) had not had a gastroscopy. In the remaining 8% (n=17), no significant pathology (including Barrett's) was found with the majority reported as normal. Other findings included gastritis (n=4) and hiatus hernia (n=4). Of these, 15/17 patients had gastroscopy within the first year after the capsule sponge.

Conclusions:

Our study shows reassuring results from the largest UK site using capsule sponge. Over both 1 and 2-year follow up periods, capsule sponge promptly identified or excluded significant upper GI pathology in a timely, cost-effective and less invasive manner, allowing symptom management without requiring gastroscopy in most patients. Safety netting via nurse-led clinic successfully identified those requiring additional tests and enabled better service resource allocation whilst reducing endoscopy waiting lists. Patients are diagnosed and managed earlier and appropriate use of gastroscopy identifies those at risk of neoplasia and those suitable for anti-reflux measures. A new paradigm for the investigation of reflux symptoms should be considered nationally.