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ORIGINAL ARTICLE

One day of upper gastrointestinal endoscopy in a southern European country

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KEYWORDS
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Abstract
Introduction: Upper gastrointestinal (UGI) endoscopic outcomes are seldom described.
Objectives: To assess UGI endoscopy performance in all Portugal's National Health Service hospitals and assess the prevalence of premalignant gastric lesions.
Methods: One randomly assigned day, cross-sectional study of UGI endoscopies.
Results: 28% of the 43 hospitals invited actually participated in the study, reporting a total of 123 UGI endoscopies. Exams were conducted on an outpatient basis in 84% of cases and 78% required no sedation. The commonest indications were presence or suspicion of GI bleeding (20%), abdominal pain or dyspepsia (18%) or reflux (12%). Histological diagnosis of atrophy was found in 19% of cases (95% CI 8–30%), extensive atrophy or intestinal metaplasia in corpus in 15% (5–25%) and positivity for *Helicobacter pylori* in 38% (23–53%). When comparing first-time vs. repeat UGI endoscopies, no differences were found in atrophy (22% vs. 14%, $p = 0.49$) and *H. pylori* (44% vs. 30%, $p = 0.36$) nor did age $<$ vs. $\geq$ 50 years was relevant (11% vs. 21%, $p = 0.51$ and 63% vs. 31%, $p = 0.10$, respectively).
Conclusions: Most UGI endoscopies carried out in Portugal are safely performed on an outpatient basis without anaesthesia and 15% of patients have extensive atrophy or intestinal metaplasia in the corpus that should be scheduled for endoscopic surveillance according to recent guidelines. Although the participation rate was low, this study is an insight for further decision analysis studies to evaluate UGI endoscopy as a surveillance option for these asymptomatic at-risk patients.

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PALAVRAS-CHAVE
Endoscopia digestiva;
Endoscopia digestiva alta;
Gastrite;
Atrofia;
Metaplasia intestinal

Um dia de endoscopia digestiva alta num país do sul da Europa

Resumo
Introdução: Estudos transversais reportando resultados de Endoscopia Digestiva Alta (EDA) são raramente descritos.
Objetivos: Avaliar o desempenho em termos de EDA em hospitais portugueses do Serviço Nacional de Saúde e a prevalência de lesões gástricas pré-malignas.
Métodos: Estudo transversal multicêntrico, num único dia, definido aleatoriamente.
Resultados: Participaram no estudo 28% dos 43 hospitais convidados, compreendendo um total de 123 EDA. Os exames foram realizados em ambulatório em 84% dos casos e 78% não necessitaram de sedação. As indicações mais frequentes foram presença ou suspeita de hemorragia (20%), dor abdominal ou dispepsia (18%) ou refluxo (12%). Histologicamente foi diagnosticada atrofia gástrica em 19% dos casos (95% IC 8–30%), atrofia extensa ou metaplasia intestinal no corpo em 15% (5–25%) e positividade para o *Helicobacter pylori* (*H. Pylory*) em 38% (23–53%). Comparando o tipo de EDA realizada, primeira vs. repetição não foram encontradas diferenças no diagnóstico de atrofia (22 vs. 14%, p = 0,49) e presença de *H. pylori* (44 vs. 30%, p = 0,36) assim como a idade < vs. ≥50 anos não foi relevante (11 vs. 21%, p = 0,51 e 63 vs. 31%, p = 0,10, respetivamente).
Conclusões: A maioria das EDA em Portugal é realizada com segurança em ambulatório e sem anestesia. Dos pacientes, 15% apresentam atrofia extensa ou metaplasia intestinal no corpo que deve ser orientada para vigilância endoscópica segundo recomendações recentes. Embora com uma taxa de participação baixa, este estudo é um ponto de partida para estudos de análise de decisão que avaliem a EDA como uma opção de vigilância para estes doentes de alto risco assintomáticos.

Introduction

Even though several publications have reported data on colonoscopy, upper gastrointestinal (UGI) endoscopic procedures and outcomes are seldom described.

In Portugal, UGI endoscopic procedures are not quantified by means of prospective or cross-sectional studies and existing data reproduce only hospital databases or the annual reports that Gastroenterology Departments provide to the Portuguese Medical Association. These databases are collected retrospectively and focus more on accountability than clinical decisions.

As Portugal is the European country with the highest incidence of gastric cancer and as this disease's prognosis is highly dependent on the stage at diagnosis (usually in an advanced stage requiring drastic and costly treatment), it is crucial to have data on prevalence of premalignant gastric lesions.[1,2] Furthermore, patient acceptance to undergo a UGI endoscopy and the manner in which these exams are performed in terms of associated techniques, complications and use of sedation, are mandatory to quantify costs that might be relevant in further economic studies that consider UGI endoscopy for population screening or follow-up of asymptomatic at-risk patients in Portugal.

Some reports can be found in the literature on Portuguese patients, but only on specific gastric cancer high-risk groups; to the best of our knowledge, no data have yet been published on the prevalence of gastric cancer precursor lesions at a national level.[3–7]

The primary aim of our study was therefore to assess, for a single day, all the UGI endoscopies performed in all Portugal's National Health Service hospitals. As a secondary objective we aimed to assess the prevalence of gastric precursor lesions at a population basis by means of a national multicentre cross-sectional study.

Materials and methods

All 43 National Health Service Portuguese hospitals with Gastroenterology Departments registered with the Portuguese Society of Digestive Endoscopy were invited to participate in this study by sending all their UGI endoscopy reports from a randomly assigned day. If biopsies were performed, the results of the relevant histopathology diagnosis were also requested.

Invitation letters were sent several months before the date chosen for the study and all Departments were invited to report all UGI endoscopies performed on a single day (November 17th, 2011).

Inclusion criteria were the completion of an already scheduled UGI endoscopy in a National Service Hospital and a signed informed consent, specific to the study. Exclusion criteria were emergency exams, failure to provide informed consent or any contraindication to performing a UGI endoscopy.

The confidentiality of all records was ensured by removing the names of patients, doctors and nurses from the reports before they were sent to the main investigator. Also, permission for compilation of multicenter national data was requested from and granted by the Portuguese Data Protection Authority (Authorisation 4639/2010). As the study