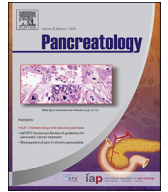




Contents lists available at ScienceDirect

Pancreatology

journal homepage: www.elsevier.com/locate/pan

Original article

Follow-up of asymptomatic pancreatic cysts in clinical practice: A vignette questionnaire

Lieke Hol*, Marco J. Bruno, Djuna L. Cahen

Department of Gastroenterology and Hepatology, Erasmus Medical Center, Rotterdam, The Netherlands

ARTICLE INFO

Article history:
Available online xxx

Keywords:
Incidental pancreatic cysts
Surveillance
Pancreatic cystic neoplasm
Intraductal papillary mucinous neoplasm
Questionnaire
Management

ABSTRACT

Background/Objectives: In absence of evidence-based guidelines of pancreatic cystic neoplasms (PCN), the management might vary among physicians. The aim of this survey was to assess the attitude of Dutch gastroenterologists (GE) towards the management of asymptomatic PCNs.

Methods: An anonymous online questionnaire was distributed to all practicing GE ($n = 381$) in The Netherlands, in which four vignette patients with PCN were presented.

Results: In total 45% of GE responded. Most respondents would perform surveillance for a 10 mm PCN (78%) mainly with an interval of one year (57%). A shorter interval of three (26%) or six (57%) months was chosen for a 25 mm BD-IPMN. Ultrasound was recommended for surveillance by 19% for a 10 mm cyst. GE with EUS experience were more likely to apply EUS for surveillance of 10 mm cyst than those without (56% vs 28%; $p < 0.001$). The presence of a branch-duct intraductal mucinous neoplasm (BD-IPMN) with a mural nodule, dilated pancreatic duct (8 mm) or increased serum CA 19.9 (300 U/ml) were considered an indication for resection by respectively 88%, 68% and 51% of respondents.

Conclusion: Dutch GE demonstrate substantial variability in the management of asymptomatic PCNs. A significant proportion of general GE still use ultrasound for surveillance of small PCNs, while GE with EUS experience were more likely to perform EUS. The presence of risk factors for malignant degeneration of IPMN were not recognized by a substantial proportion of GE. Data on the natural history of PCNs is required to provide input for evidence-based guidelines, which should lead to a more uniform approach. Copyright © 2016, IAP and EPC. Published by Elsevier India, a division of Reed Elsevier India Pvt. Ltd. All rights reserved.

Background

Incidental pancreatic cysts are frequently encountered in this time of elaborate imaging [1]. The reported incidence varies, depending on the applied imaging technique and clinical setting. In Computed Tomography (CT) series of symptomatic patients, the prevalence varies from 0.5 to 3%. In Magnetic resonance imaging

(MRI) studies, a prevalence of 2.4% has been reported in healthy individuals [2]. In a post mortem study by Kimura et al., cysts less than 1 cm in size were detected in 24% of cases [3].

Many cysts are benign, but a small number have a malignant potential (e.g. solid pseudopapillary tumor, mucinous cystic neoplasm, and intraductal papillary mucinous neoplasms (IPMN)) and require regular follow-up or even surgical resection [4,5]. Unfortunately, to distinguish these small pancreatic cysts is often impossible [6]. Also, longitudinal data regarding their natural history and predictive factors of malignant degeneration are absent and therefore, the cancer risk is currently unknown.

As a result, evidence-based guidelines are absent, although several consensus guidelines were issued in the last decade [7–11]. Recommendations on management and surveillance vary between the available consensus guidelines. As a consequence, physicians lack distinct guidance in managing patients with a PCN and face a difficult dilemma: to miss a pancreatic carcinoma or expose the majority of patients with a benign lesion to redundant

Abbreviations: BD-IPMN, branched-duct intraductal papillary mucinous neoplasm; CT, computed tomography; ERCP, endoscopic retrograde cholangiopancreatography; EUS, endoscopic ultrasound; UEG, United European gastroenterology; MCA, mucinous cystadenoma; MD-IPMN, main-duct intraductal papillary mucinous neoplasm; MPD, main pancreatic duct; MRI/MRCP, magnetic resonance imaging/magnetic resonance cholangiopancreatography; SCA, serous cystadenoma; SPN, solid pseudopapillary neoplasm; US, Ultrasound.

* Corresponding author. Erasmus University Medical Centre, Department of Gastroenterology and Hepatology, 's Gravendijkwal 230, 3015 CE Rotterdam, The Netherlands. Tel.: +31 (0)10 7040704x1861; fax: +31 (0)10 7030352.

E-mail address: l.hol.1@erasmusmc.nl (L. Hol).

<http://dx.doi.org/10.1016/j.pan.2016.02.007>

1424-3903/Copyright © 2016, IAP and EPC. Published by Elsevier India, a division of Reed Elsevier India Pvt. Ltd. All rights reserved.

investigations or even unnecessary surgery, with a significant complication risk. So far, little is known about the current clinical practice. We therefore investigated the attitude of Dutch Gastroenterologists (GE) towards the management (imaging modality, follow-up frequency, and criteria for resection) of asymptomatic pancreatic cysts and compared this to the current guidelines.

Material and methods

For this cross-sectional survey, a list of all registered GE in the Netherlands was obtained from the Dutch association of Gastroenterologists (NVGE). An anonymous on-line questionnaire was sent to them by email. Four weeks later, a reminder email was sent out to all invitees.

Vignette survey

The questionnaire was divided in two sections (Appendix 2). The first part concerned the background of the treating GE, including age, gender, and type of practice (university or community hospital). Also, it assessed experience, in terms of years of practice, number of yearly-diagnosed cysts, and yearly-performed endoscopic ultrasounds (EUS). In this paper gastroenterologists performing EUS are referred to as EUS specialists and GE without EUS experience as general GE. The second part consisted of four case vignettes, each handling a different type of pancreatic cystic neoplasm (PCN). These questions were based on the recommendations of the European Expert panel (Appendix 1). In Appendix 1 the recommendations of the current available guidelines are summarized. The questions concerned the choice of imaging studies, need and timing of follow-up, and the criteria for surgical resection. The questionnaire took approximately 5–10 min to complete.

Statistics

The number of correct answers among subgroups (e.g. type of practice) were analyzed with the Chi-squared-test and Mc Nemar test. Categorical variables were evaluated with a Fisher exact test. Univariate comparisons were conducted to identify individual characteristics that influenced the answers. For this, the T-test or ANOVA were used. All reported *p*-values were two-sided, with a significance level of 0.05. Data were analyzed with SPSS 21, Statistical Package for the Social Sciences (SPSS Inc., Chicago, Illinois).

Results

We approached 412 registered GE for this study. Thirty-one (7.5%) were excluded from analyses due to an incorrect or unavailable email address ($n = 24$) or because they were no longer practicing ($n = 8$). Responses were received from 170/381 (45%) GE. Their baseline characteristics are described in Table 1. Of the

Table 1
Baseline characteristics of respondents.

| | |
|----------------------------------|------------|
| Total respondents (<i>n</i> -%) | 170 (45) |
| Sex, male (<i>n</i> -%) | 138 (81) |
| Mean age (yrs-SD) | 46.8 ± 9.1 |
| Main practicing hospital | |
| Community (<i>n</i> -%) | 133 (78) |
| University (<i>n</i> -%) | 33 (19) |
| Both (<i>n</i> -%) | 4 (2) |
| Experience (yrs-SD) | 12.4 ± 8.1 |

Abbreviations: yrs: years; SD: standard deviation.

respondents, 85 reported to treat less than 10 PCN a year (50%), 77 treated 10–50 cysts (45%), and eight over 50 cysts per year (5%). PCN were more frequently seen in university than in community hospitals ($p = 0.012$). The majority of GE had access to EUS in their hospital (149, 88%) and 70 respondents (41%) performed EUS themselves. Four GE (6%) reported an annual EUS volume of less than 50, 51 perform 50–150 EUS annually (73%), and 15, more than 150 procedures (21%).

Imaging modality

For the diagnostic work-up of a 10 mm cyst detected with ultrasound (US), 156 (92%) chose to perform additional imaging (25% CT, 21% MRI, and 45% EUS).

Surveillance

In total, 133 (78%) GE would recommend surveillance of a 10 mm unspecified cyst without worrisome features. Most GE suggested a surveillance interval of 12 months (57%); the remainder chose a three (5%), six (31%), or 24 months (7%) interval. In comparison, a shorter interval of three (26%) or six months (57%) was chosen for a 25 mm BD-IPMN. Without changes, most respondents (89%) would discontinue surveillance of the 10 mm cyst after five years and respectively 8%, 3% and 0% would lengthen the surveillance interval, continue or intensify surveillance. A conventional US was recommended for surveillance of a 10 mm cyst by 19% of GE, while 7% chose US to follow a 25 mm cyst. The majority, however, suggested more sensitive surveillance techniques for both the 10 and 25 mm cyst, such as CT (19 and 13%), MRI/MRCP (22 and 22%), or EUS (39 and 57%). EUS was chosen significantly more often for 25mm than for 10mm PCNs ($p < 0.001$).

Criteria for resection

Presence of malignant features in a branch duct IPMN (BD-IPMN), such as a mural nodule, main pancreatic duct (MPD) dilatation 8 mm, or elevated serum CA 19.9 (300 U/ml) were considered to be an indication for resection by 150 (88%), 116 (68%), and 86 (51%) of respondents, respectively (Table 2). In cysts without malignant features, resection was more often recommended for cysts of 25 mm (25%) and 45 mm (30%), than for a 10 mm cyst (0%, $p < 0.001$). Cyst growth from 10 to 13 mm in one year was considered to be a resection criterion by six respondents (4%). A significantly higher proportion recommended resection when the cyst increased from 10 to 20 mm in the same year ($n = 52$, 31%, $p < 0.001$) (Table 2).

EUS specialists

GE performing EUS (EUS specialists) reported treating more than 10 PCN patients annually significantly more often than their colleagues (general GE); 89 vs 24%; $p < 0.001$). General GE more often omitted surveillance of a 10 mm cyst without malignant features (12 vs 3%; $p = 0.01$), whereas EUS specialists more frequently used EUS to further investigate this 10 mm cyst (57 vs 37%, $p = 0.03$). In addition, EUS specialists were more likely to survey 10 mm cysts with EUS than general GE (56 vs 28%; $p < 0.001$), while for larger cysts (25 mm), EUS use was similar in both groups (61 vs 54%, $p = 0.14$, Fig. 1). Instead of using EUS, general GE were more likely to use conventional US (25 vs 11%, $p = 0.03$) or CT (28 vs 7%, 0.001) for surveillance of a 10 mm cyst (Fig. 1). EUS specialists were less likely to refer a patient with a 25 mm cyst for surgery, as compared to general GE (10 vs 35%, $p < 0.001$), while these numbers were similar for 10 and 45 mm cysts (Table 3). Both groups equally opted for surgical resection

Download English Version:

<https://daneshyari.com/en/article/3316646>

Download Persian Version:

<https://daneshyari.com/article/3316646>

[Daneshyari.com](https://daneshyari.com)