

antenatal visit) in those with a personal or family history of thyroid disease.

The records of 4,083 pregnant women attending the James Cook University Hospital, Middlesbrough from January to December 2000 were reviewed. 65 (1.6%) of these 4,083 women had known thyroid disease, and a further 486 (11.9%) had a family history of thyroid disease (Table 1). Therefore, according to our guideline, thyroid function screening was indicated in 551 (13.5%). However, we found that only 98 (17.8%) of the 551 had thyroid function checked at antenatal booking.

At booking, 60 (92.3%) of the 65 women with known thyroid disease had thyroid function tests performed. Seventeen (28.3%) had high TSH, and seven (11.7%) also had low free thyroxine (FT4). Four (6.2%) women with known thyroid disease had suppressed TSH with raised FT4. Only 38 (7.8%) of 486 women with a family history and who were not known to have thyroid disease were screened, and two had elevated TSH.

More than one quarter (28.3%) of pregnant women with pre-existing thyroid disease have a high TSH at booking. Checking thyroid function in women with known thyroid disease at booking (12–16 weeks gestation) may be too late, as the mother is the sole source of thyroxine for the fetus up to about 12 weeks gestation⁴. All women with thyroid disorders should ideally have optimised thyroid replacement prior to conception. Thyroid function tests (TSH

and FT4) should be performed as soon as pregnancy is confirmed, and the dose of thyroxine amended as necessary at the earliest opportunity⁵.

The UK has no national guidelines on screening thyroid function during pregnancy. However, a recent statement from The British Thyroid Association recommends checking thyroid function at booking in pregnant women with a past or family history of thyroid disease, with type 1 diabetes, and/or with symptoms of thyroid disease⁶. Thyroid screening in high-risk pregnant women has also been advocated by other authorities, including The Endocrine Society⁷ and The American Association of Clinical Endocrinologists⁸. However, the present study shows that more than 80% of the high-risk pregnant women in our district were not screened despite the local development and circulation of guidelines.

References

- Haddow JE, Palomaki GE, Allan WC, Williams JR *et al*. Maternal thyroid deficiency during pregnancy and subsequent neuropsychological development of the child. *N Engl J Med* 1999;**341**:549–55.
- Pop VJ, Kuijpers JL, van Baar AL, Verkerk G *et al*. Low maternal free thyroxine concentrations during early pregnancy are associated with impaired psychomotor development in infancy. *Clin Endocrinol* 1999;**50**:149–55.
- Lazarus JH, Kokandi A. Thyroid disease in relation to pregnancy: a decade of change. *Clin Endocrinol* 2000;**53**:265–78.

- Vulsma T, Gons MH, de Vijlder JJM. Maternal-fetal transfer of thyroxine in congenital hypothyroidism due to a total organification defect of thyroid agenesis. *N Engl J Med* 1989;**321**:13–16.
- Mandel SJ, Larsen PR, Seely EW, Brent GA. Increased need for thyroxine during pregnancy in women with primary hypothyroidism. *N Engl J Med* 1990;**323**:91–6.
- www.british-thyroid-association.org/pregnancy.htm/
- www.endo-society.org/pubrelations/pressReleases/archives/1999/hypothyroid.cfm/
- www.acce.com/clin/guidelines/pregnancy.pdf/

B VAIDYA

Locum Consultant Physician

M BILOUS

Diabetes & Endocrine Specialist Nurse

RS HUTCHINSON

Consultant Obstetrician & Gynaecologist

V CONNOLLY

Consultant Physician

S JONES

Consultant Physician

WF KELLY

Consultant Physician

RW BILOUS

Professor of Clinical Medicine & Consultant Physician

*The James Cook University Hospital
Middlesbrough*

One stop swallowing clinic may be more effective than a new cancer clinic

Introduction

The relatively high mortality rates for cancer in the UK may partly be explained by delay in diagnosis¹. To improve services, National Service Framework with the 'two-week cancer initiative' was set up with special clinics staffed by multidisciplinary teams to circumvent delays. These clinics have had limited success², while using scarce resources at the expense of 'non-urgent patients'³. We describe our experience of a specialty clinic setup in 1990, to assess and manage patients with swallowing disorders, and its role in the NHS today.

The Clinic

Our swallowing clinic serves as a regional centre for swallowing disorders, providing single stop consultation and Upper GI Endoscopy (UGIE) followed by review and if needed, fast track investigations including barium studies, oesophageal manome-

Table 1. Thyroid function screening in pregnant women at antenatal booking (total n=4,083) at the James Cook University Hospital, Middlesbrough, UK for the year January to December 2000.

Sub-groups of pregnant women	Number in whom thyroid screening indicated (% of total)	Number in whom thyroid screening performed (% of those indicated)
With known thyroid disease		
Hypothyroidism*	49 (1.2%)	49 (100%)
Thyrotoxicosis (past/current)	15 (0.4%)	10 (66.7%)
Non-toxic goitre	1 (0.02%)	1 (100%)
Total	65 (1.6%)	60 (92.3%)
With family history of thyroid disease	486 (11.9%)	38 (7.8%)
High risk group (those with known thyroid disease and/or family history)	551 (13.5%)	98 (17.8%)

*Includes primary hypothyroidism (n=42), post-thyroidectomy (n=6) and hypopituitarism (n=1)

try, pH monitoring, speech therapist assessment and ENT consultation.

The team consists of a gastroenterologist (prioritised referrals), registrar and endoscopy nurse. An information sheet about the procedure, the various expected findings and information about oesophageal dilatation was sent with the appointment letter.

Results

Over two years 197 patients attended the clinic, with a mean age of 57.9 years. The pathology seen is shown in Table 1. Forty-nine patients underwent oesophageal dilatation. Six of the 11 patients with oesophageal cancer had oesophageal stents inserted, two had percutaneous gastrostomy, three had radiotherapy and one had oesophagectomy. Patients managed endoscopically had no significant complications. Nineteen patients underwent oesophageal manometry/pH monitoring, 46 patients had radiological investigations.

In a conventional set-up our 197 patients would have had to make 443 hospital trips. The integrated clinic saved 245 hospital trips (55%). The patients were well informed and thus gave the necessary consent for a combined diagnostic and therapeutic procedure saving the hospital 49 diagnostic UGIE. Significant savings in administrative costs were realised by avoiding booking further appointments and endoscopies.

The mean waiting time was 2.76 weeks for all patients and for GI cancer it was 1.75 weeks, comparing favourably with the average waiting time of 16 weeks from referral to endoscopy at our hospital.

Table 1. Pathology seen at the one stop swallowing clinic over a period of two years.

Pathology seen	Number of patients
Oesophageal cancer	11
Peptic strictures	36
Achalasia	2
Dysmotility	19
Globus	19
Peptic ulcer disease	11
Others	17
Gastroesophageal reflux disease	80
Pharyngeal pouch	2

Patients were satisfied by the promptness and care they received.

Discussion

Special clinics are increasingly being used to meet the two-week cancer initiative. This is by resource redirection rather than creating new services, leading to longer waiting times for 'routine' patients.

We feel we have a way out. Dysphagia is an uncommon presentation, which correlates well with sinister pathology, helping us to select patients who need urgent attention. Out of the 197 patients who attended the clinic 49 (24.9%) underwent intervention. By performing a combined diagnostic and therapeutic procedure the clinic achieved significant cost and resource savings without compromising standards. By reducing hospital visits the clinic reduced invisible costs for the patient and decreased disruption in their life. Cancer patients were diagnosed promptly and necessary management instituted without waiting. A pragmatic approach to diagnosis and management, which provides for a 'single session' service leads to better resource use, by preventing unnecessary or repeated examinations.

Acknowledgements

The authors wish to acknowledge the efforts of Profesor JR Bennett (Consultant (retired), Hull Royal Infirmary), who initiated the swallowing clinic and guided us through its evolution to its present form. The authors wish to thank Dr S Babu (Specialist Registrar, Hull Royal Infirmary), for his contribution in carrying out the initial survey.

References

- 1 Jones R, Rubin G, Hungin P. Is the two-week rule for cancer referrals working? *BMJ* 2001;**322**:1555-1556.
- 2 Davies RJ, Welbourn R, Collins C, Kennedy R, Royle C. A prospective study to assess the implementation of a fast track system to meet the two-week target for colorectal cancer. *Gut* 2001; **48**(Suppl 1):A53.
- 3 Moreea S, Green J, MacFie J, Mitchell CJ. Impact of the two week waiting time standard on the gastroenterology service of a district general hospital. *Gut* 2001; **48**(Suppl 1):A3.

V GOEL
Specialist Registrar

M DAKKAK
Consultant

Hull Royal Infirmary, Hull