DR. JEFFERY AND PARTNERS

SURGICAL UPDATE

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Management of nodular thyromegaly

Thyroid nodules are common with an incidence in the adult population of appr oximately one in twenty five people.

Despite this high frequency thyroid cancer remainís rare - 39cases/million population. However it is important to exclude malignancy in these patients.If the diagnosis is made early and the patient managed appropriately these patients have an excellent prognosis

WHO IS AT RISK?

The risk of malignancy is higher in

- Children and the elderly
- Males
- Rapid growth.
  (However sudden enlargement - over hours or days is typically seen with haemorrhage into a cyst)
- Family history of thyroid carcinoma

WHA T T O LOOK FOR?

- Palpable thyroid
  A normal thyroid gland is not palpable! The thyroid gland is best examined with the patient seated and the examiner standing behind the patient
- Signs of hyper/hypothyroidism
- Lymphadenopathy
  (Is the most reliable sign of malignancy.)
- Compression symptoms :- dyspoea, dysphagia,hoarseness,Horner's syndrome maybe indicative of local tissue invasion from malignancy or from benign disease

WHA T T O DO?

- Ultrasound
  Must be done on all patients with a palpable thyroid.It is the single most useful investigation.It is simple, cheap, non invasive and its results are reproducible.

It will also differentiate
solitary vs multinodular goitre
solid vs cystic nodule
and will detect *lymph node*

If the ultrasound confirms the clinical impression a surgical opinion is essential

- Thyroid functions
  is essential to determine thyroid functioning

- Fine needle aspiration biopsy (FNAB)
  It is the most useful tool in differentiating benign from malignant nodules.In experienced hands (surgeons,cytopathologists)it is simple, safe and itís accuracy is generally greater than 90% with accuracies of 95 - 97% reported

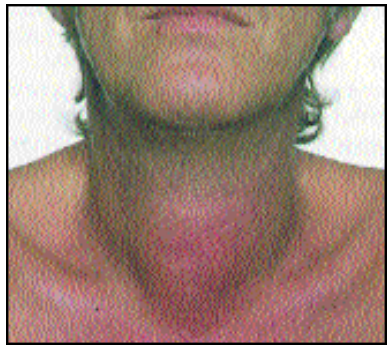
- Radio - isotope scanning
  Hardly used as it merely confirms what one suspects clinically and on ultrasound and does not differentiate between benign and malignant disease.

MANAGEMENT

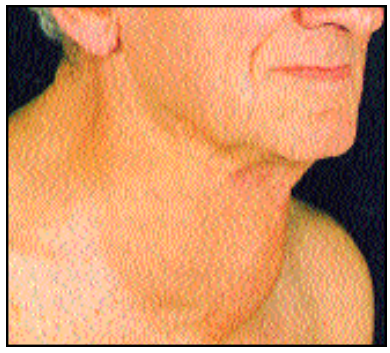
Treatment of thyroid nodules is surgical.The procedure is determined by the type of nodule and the FNAB

- Solid solitary nodule
  If malignant or suspicious on FNAB the patient will require a thyroid lobectomy
  If benign - close follow up and repeat biopsy is essential

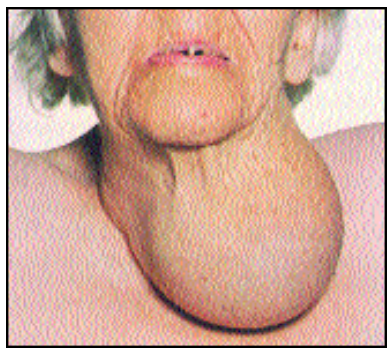
- Thyroid cysts
  Should all be aspirated to dryness.If a residual mass is present and /or the fluid is blood stained a thyroid lobectomy is essential.However if the cyst resolves completely - a close follow is all that is needed.



DIFFUSE GOITRE



SOLITARY NODULE



LIPOMA!

TAKE HOME MESSAGE
A solid solitary nodule is a carcinoma until proven otherwise

BREAST CARCINOMA

- RISK

Breast carcinoma is the commonest carcinoma in women and the second commonest cause of cancer death among women.The incidence has been rising over the past 30 years.Reasons for the rise are speculative but include improved methods of detection,increased longevity in women, delayed childbirth and possible dietary influences.

Roughly 5 - 10 % of breast cancers have a hereditary predisposition and the rest are sporadic.The risk of a woman developing breast carcinoma is a controversial subject. The are several recognized risk factors,which can be divided into 3 main groups (genetic, endocrine or environmental) and each factor, may be major, moderate or minor.

MAJOR RISK

Sex
Breast carcinoma is 100 times more common in women than in men.
Age
Majority of breast carcinomas are in women over the age of 50.Up to to the age of 70 the rate of increase of breast carcinoma is age specific.
Previous breast carcinoma.
The risk of developing a metachronous carcinoma either in the same breast or the contralateral breast is well established.
The incidence rises annually upto about 20% after 20 years.
Family history.
The risk is greatest in patients with first degree relatives (mother or sister) affected, especially if they were under the age of 50.In a small minority of these familial cancers, there is an inherited genetic defect (BRCA1 or BRCA2 gene).

Hormone replacement therapy
The data relating to risk is conflicting but it is generally accepted that after about 5 years of therapy the risk increases.
However reductions in risk of coronary heart disease and osteoporosis are greater than increase in risk of breast carcinoma.

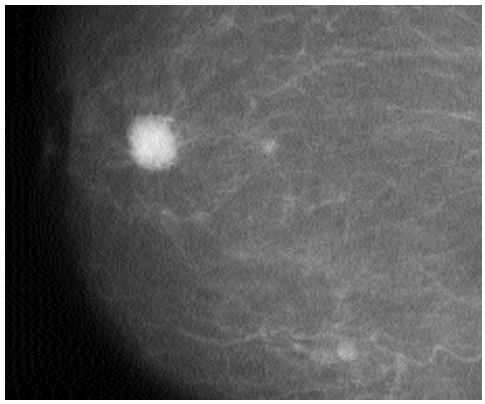
MODERATE RISK (Controversial)

Nulliparity Early menarche Late menopause Irradiation Hormone replacement therapy Biopsy showing proliferative breast lesion with atypia.

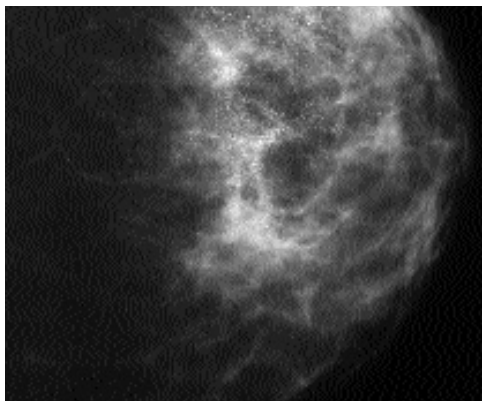
MINOR RISK (Controversial)

- Combined oral contraceptives
- Alcohol
- Dietary factors
- Body weight

Take home message:
Breast carcinoma is the commonest cancer in females.
There are definite risk factors to development of breast carcinoma (family history, previous breast carcinoma,the female sex and older age)



TYPICAL MAMMOGRAM OF A BREAST CARCINOMA



CLASSICAL DCIS

- SCREENING

Screening for breast cancer is examining or testing women for early stages of cancer even though they have no symptoms.There are several methods of screening for breast carcinoma. *Breast Self Examination* (BSE)

BSE alone does not reduce death from breast cancer. It should not be used in place of mammography or clinical breast examination.

Clinical Breast Examination (CBE)
This is performed by the healthworker. There is lack of evidence as to its efficiency if used alone. More useful if in conjunction with mammography and BSE.

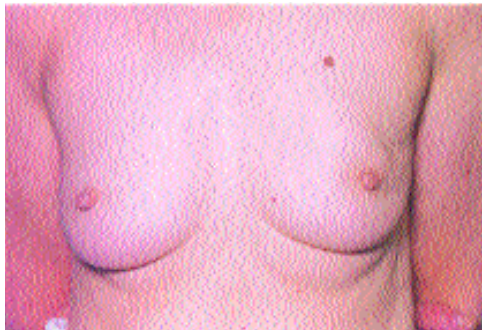
Mammography
Mammography is the most useful tool used for screening in breast carcinoma.It enables diagnosis of small tumors (good prognosis tumors).The usefulness of mammography is different depending on age.

40-49
There is controversy as to whether mammography reduces the number of deaths from breast carcinoma when used as a screening tool in asymptomatic women. Latest evidence seems to indicate benefit. However this is a subject of ongoing research.

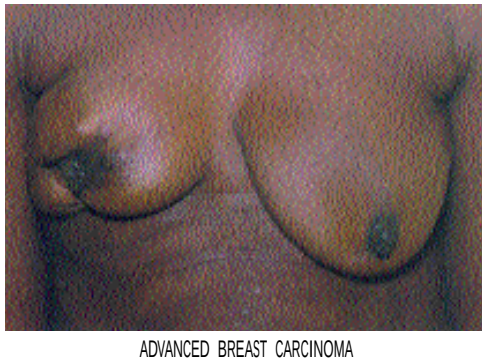
50-69
Many studies have shown that regular breast cancer screening in this age group reduces the risk of dying from breast cancer. Screening is therefore strongly indicated.

Over 70
The usefulness of screening of asymptomatic women in this age group is doubtful. Unfortunately there are very few studies on screening in this age group.

Take home message:
The risk of women dying from breast carcinoma can be reduced by screening with mammography, BSE,and CBE.
Women between the ages of 50 and 69 benefit the most.



EARLY BREAST CANCER



ADVANCED BREAST CARCINOMA

DYSPEPSIA

Dyspepsia is a broad term which often leads to confusion.

Simply put,dyspepsia is pain or dyscomfort centred in the upper abdomen. The pain may be intermittent or continuous. There may or may not be heartburn.Most cases of clinically significant dyspeptic symptoms are present for four weeks or longer.

Dyspesia is very common in the general population,with prevalent rates quoted at between 25 - 40 %.

Organic Causes of Dyspepsia

There are many causes (Table 1). Of these, peptic ulcer disease and reflux are by far the most common. However, upper gastro-intestinal malignancy is also common and should always be considered.

Presentation

Ulcer-like

- May be relieved by food and antacid therapy
- Periodic in nature
- Pain may wake the patient at night

Dysmotility-like

- Associated with nausea and vomiting
- Associated with bloating and distension
- Often relieved by belching

Reflux-like

- Intermittent attacks of heartburn

Unclassified

- Some patients' symptoms do not fit into any of above groups

MANAGEMENT

The main aim is to identify those who need further investigation. The initial assessment entails a thorough history and examination to try to identify those patients with possible serious underlying disease. However the development of definite management guidelines for investigation is difficult because of the poor correlation between symptoms of dyspepsia and specific disease process. The list (Table II) highlights some of the alarm signs that can help identify patients at risk.

High-risk patients

Those identified as being at high risk for presence of underlying disease should have endoscopy.
This is preferred over barium meal as it has a high level of sensitivity and specificity, identifies mucosal pathology and allows opportunity for biopsy. A barium meal should be performed if reliable endoscopy is not available.

Low-risk patients

These patients can be managed in one of two ways:

Empiric therapy

Patients are commenced on symptomatic treatment for 2 - 4 weeks.Further investigation is reserved for treatment failures. This approach unfortunately sometimes results in masking of symptoms and delay in diagnosis of serious organic disease.

Immediate evalution

This has been found to be cost effective in some studies. The additional advantage is that there is a higher reassurance of the patient after immediate evaluation.

AETIOLOGY OF ORGANIC DYSPEPSIA
(Table 1)

Peptic Ulcer Disease

- Duodenal ulcers
  - association with H. pylori
- Gastric ulcers
  - less association with H. pylori
  - high association with NSAID

Gastro-esophageal reflux disease

Neoplastic disease

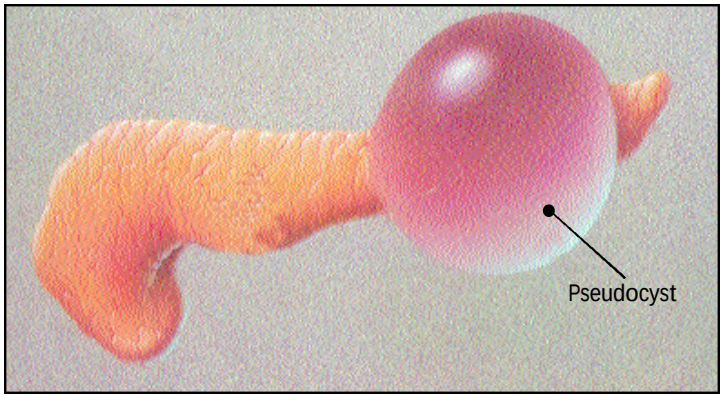
- gastric carcinoma
- esophageal carcinoma

Others (uncommon)

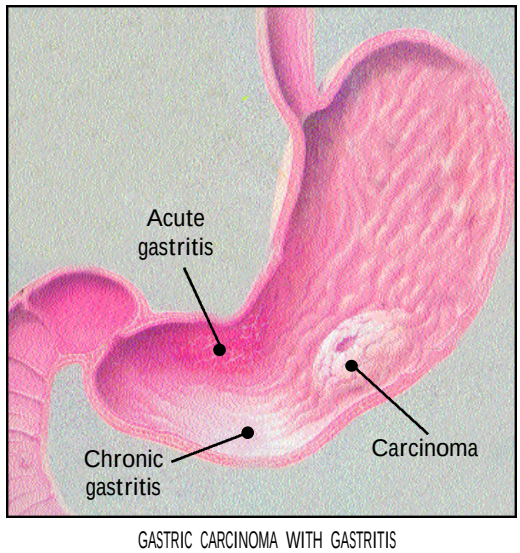
- Biliary tract disease
- Gallstones
- Pancreatitis
- Pancreatic cancer
- Lactose intolerance
- Ischaemic heart disease

ALARM SIGNS OF POSSIBLE UNDERLYING SERIOUS DISEASE
(Table II)

- Patient with poor response to 1st line therapy
- Older patient
- Constant or severe pain
- Dysphagia
- Anorexia or early satiety
- Significant weight loss
- Vomiting
- Anaemia
- Palpable abdominal mass
- Enlarged supraclavicular nodes
- Enlarged liver
- Melaena or positive occult blood
- Previous gastric surgery
- History of peptic ulcer disease
- History of NSAIDs
- Others - personal preference, anxiety



PSEUDOCYST OF THE PANCREAS



GASTRIC CARCINOMA WITH GASTRITIS

DID YOU KNOW?

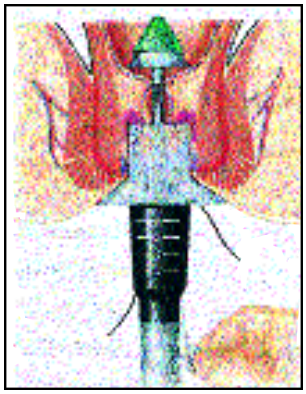
Painless haemorrhoidectomy?

Yes! The haemorroidal circular stapler offers selected patients a painless day case, cost effective haemorroidectomy.

It is promising,our initial results are very encouraging and patient acceptance has been good.

As with all new procedures there is a definite learning curve and at present it remains under evaluation.

Haemorrhoidal Circular Stapler



The Town Centre Breast Clinic which will be run by Dr Jeffery and Partners will commence in September 2000. It will be located at Suite 706 at the Mitchells Plain Medical Centre.

For details,contact us on 3911793/4 or 6833893.

OUR NEW ROOMS

At Mitchells Plain Medical Centre
Location - Suite 706
Phone - 391 1793/4

OBSTRUCTIVE JAUNDICE

A concern with the jaundice patient is that obstruction is often diagnosed late with resultant life threatening complications.

The simplest approach would be to suspect obstruction in all patients with jaundice and if any doubt an ultrasound of the abdomen will resolve the question.

CAUSES

- Common bile duct stone's
- Cancer of the head of the pancreas
- Periampullary tumors
- Stricture of the bile duct
  Benign/malignant
- Chronic pancreatitis
- Worms in the common bile duct

PRESENT ATION

Patients with obstructive jaundice classically present with

- Deep jaundice
- Pale stools
- Dark urine
- Pruritis -

(although typical of an obstructive picture may be absent and occasionally may be the only presenting symptom!)

Temperature together with rigors and jaundice is due to cholangitis until proven otherwise.

Common bile duct (CBD) stones and cancer of the head of the pancreas (CaHoP) make up 80% of cases with obstructive jaundice. In patients with CBD stones the jaundice is usually sudden in onset,intermittent and associated with biliary colic type pain.
In patients with ca HoP the jaundice is usually gradual in onset,progressive and painless.

INVESTIGATIONS

Ultrasound
Of the abdomen Is the single most useful investigation to confirm obtructive jaundice.The level of the obstruction and a possible cause will often be confirmed at the same time

Liver functions
The typical features of obtruction raised are:-

- total bilirubin
- alkaline phosphatase
- gamma glutaryl transferase and the transaminases typically only slightly elevated

MANAGEMENT

The traditional approach to CBD stones is a preopeartive ERCP and sphincterotomy with stone extraction ad then followed by a laparoscopic cholecystectomy.

The advanced lap surgeon will now consider laparoscopic CBD exploration in selected patient with proven CBD stones. The advantage to the patient is that with a single procedure both the gall stones and CBD stones can be addressed.

Ca HoP and periampullary tumor's should ideally be referred once the diagnosis is suspected. Interventional radiology (PTC, ERCP), should only be done once the patient has been fully assesed and decision made re patient fitness for surgery and resectability of the tumor.

The concern with interventional radiology is the risk of cholangitis and perforation which could convert a potentially curative procedure to a palliative one.

TAKE HOME MESSAGE: *Jaundice - consider obstruction!*

Look for us on the web

Dr. Jeffery and Partners now has it's own website at http://www.surgcare.co.za
This website is currently under construction but when completed will have all the previous editions of Vascular Update, G.I. Update and Surgical Update as well as lots of useful and interesting information on many aspects of our surgical practice. For any comments on Surgical Update or any other queries e-mail us at surgeons@surgcare.co.za