Abdominal Mass
Patient Management Process

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Abdominal Mass

History

Physical Examination
Abdominal Mass

History

Onset

Location

Associated Symptoms

• acute
• chronic
• progressing
Abdominal Mass

History

Onset

Location

Associated Symptoms

- Upper Abdomen
- Lower Abdomen
Abdominal Mass

History

Onset

Location

Associated Symptoms

- pain
- fever
- Abdominal Distention
- GI symptoms
- Urinary Symptoms
- OB & Gyne symptoms
- Endocrine
- Cardiovascular
- Hematologic
Abdominal Mass

Physical Examination

Inspection

Auscultation

Palpation

Percussion

Other Maneuvers

• shape of abdomen
• scar
• superficial lesions
• bulges
Abdominal Mass

Physical Examination

Inspection

Auscultation

Palpation

Percussion

Other Maneuvers

- Bowel sounds
  - None
  - Hypoactive
  - Hyperactive
- Tenderness
- Bruit
Abdominal Mass

Physical Examination

Inspection
Auscultation
**Palpation**
Percussion
Other Maneuvers

• Tenderness
• Rigidity
• Character of mass
Abdominal Mass

Physical Examination

Inspection
Auscultation
Palpation
Percussion
Other Maneuvers

- Distinguishes causes of distention
  - Gas
  - Fluid
  - Solid
Abdominal Mass

Physical Examination

- Inspection
- Auscultation
- Palpation
- Percussion
- Other Maneuvers

- Fothergil sign
- Psoas sign
Abdominal Mass

Physical Examination

Rectal Examination

Pelvic Examination
Abdominal Mass

HISTORY AND P.E.

Abdominal Wall

Intra-abdominal

Intraperitoneal

Retroperitoneal
Abdominal wall Mass

HISTORY AND P.E.

INFECTIOUS

NON - INFECTIOUS

MALIGNANT

NON - MALIGNANT
Intra-abdominal Mass

HISTORY AND P.E.

INFECTIOUS

NON – INFECTIOUS

MALIGNANT

NON – MALIGNANT
Abdominal Mass

HISTORY AND P.E.

Abdominal Wall

Intra-abdominal

INFECTIOUS

NON – INFECTIOUS

MALIGNANT

NON – MALIGNANT
What reliable symptoms and signs will make us diagnose with certainty (90% or higher) that a patient has abdominal wall mass due to infection?

- acute onset
- signs of inflammation
INFECTIOUS

• Bacterial
  – Cellulitis
    • folliculitis
  – Abscess
    • Furuncle
    • Carbuncle

• Viral

• Fungal
INFECTIOUS

• Do we need a paraclinical diagnostic procedure?
• NO
INFECTIOUS

• Treatment Option(s)
  – Medical
    • Antibiotics - bacterial
    • Anti-fungal - fungal
    • Removal by chemical – viral (warts)
  – Surgical
    • Incision and drainage
    • Debridement
    • excision
Abdominal Mass

HISTORY AND P.E.

Abdominal Wall

Intra-abdominal

INFECTIONOUS

NON - INFECTIONOUS

MALIGNANT

NON - MALIGNANT
MALIGNANT

What reliable symptoms and signs will make us diagnose with certainty (90% or higher) that a patient has abdominal wall mass due to malignancy?

– Chronic, progressive
– Invasive
– Character of mass
  • Pigmented
  • Irregular borders
  • Hard in consistency
MALIGNANT

- Basal Cell CA
- Squamous cell CA
- Malignant Melanoma
- Dermatofibrosarcoma
- Liposarcoma
MALIGNANT

• Do we need a paraclinical diagnostic procedure?
• NO
MALIGNANT

• Treatment
  – Primary Lesions
    • Surgical – wide excision
  – Alternative
    • Radiotherapy
    • Chemotherapy
Abdominal Mass

HISTORY AND P.E.

Abdominal Wall

Intra-abdominal

INFECTIOUS

NON – INFECTIOUS

MALIGNANT

NON – MALIGNANT
NON-MALIGNANT

What reliable symptoms and signs will make us diagnose with certainty (90% or higher) that a patient has abdominal wall mass due to a benign condition?
chronic, non-progressive
non-hard mass, non-invasive
no signs of inflammation
NON MALIGNANT

- Epidermal inclusion cysts
- Lipoma
- Hemangiomas
- Vascular Malformations
NON MALIGNANT

- Do we need a paraclinical diagnostic procedure?
- NO
NON MALIGNANT

• Treatment Options
  – Excision
Abdominal Mass

HISTORY AND P.E.

Abdominal Wall

Intra-abdominal

Intraperitoneal

Retroperitoneal

Approached by regions
NON-MALIGNANT

What reliable symptoms and signs will make us diagnose with certainty (90% or higher) that a patient has intra-abdominal mass due to an infectious process, benign or malignant condition?

None
Possible Causes of Abdominal Masses by Regions

• Epigastric Area
  – Gastric Tumors
  – Hepatomegaly/ Liver tumors
  – Transverse colon tumors
  – Abdominal aortic aneurysm
  – Pancreatic tumors
Intra-abdominal Epigastric Mass

HISTORY AND P.E.

- History of fever
- Jaundice
- Abdominal pain

INFECTIOUS

- Liver:
  - Hepatitis
  - Hepatic Abscess
- Pancreas:
  - Pancreatitis

NON – INFECTIOUS

MALIGNANT

NON – MALIGNANT
Intra-abdominal Epigastric Mass

HISTORY AND P.E.

History of fever
Jaundice
Abdominal pain

hepatomegaly

INFECTIOUS

Liver:
Hepatitis
Hepatic Abscess

Pancreas:
Pancreatitis

NON – INFECTIOUS

MALIGNANT

NON – MALIGNANT
Intra-abdominal Epigastric Mass

HISTORY AND P.E.

History of fever
Jaundice
Abdominal pain

INFECTIOUS

Liver:
Hepatitis
Hepatic Abscess

Pancreas:
Pancreatitis

NON - INFECTIOUS

MALIGNANT

NON - MALIGNANT
INFECTIOUS

Do we need a paraclinical diagnostic procedure?
YES

Abdominal ultrasound
Blood chemistry
Infectious

- Treatment Options
  - Medical
  - Surgical
    - Hepatic abscess not responsive to medical
    - Necrotizing Pancreatitis
Intra-abdominal Epigastric Mass

HISTORY AND P.E.

Dyspepsia
Early Satiety
Vomiting
Hx of peptic ulcer

Gastric tumor

INFECTIOUS

NON – INFECTIOUS

MALIGNANT
NON – MALIGNANT
Intra-abdominal Epigastric Mass

HISTORY AND P.E.

Dyspepsia
Early Satiety
Vomiting
Hx of peptic ulcer

Gastric tumor

INFECTIOUS

NON – INFECTIOUS

MALIGNANT

NON – MALIGNANT
Gastric Tumors

Do we need a paraclinical diagnostic procedure?
YES

EGD
Possible Causes of Abdominal Masses by Regions

• Right Hypochondriac
  – hepatomegaly / liver tumors
  – enlarged gallbladder
  – gastrointestinal malignancy
  – Colonic tumors
  – Small Intestinal tumors
Possible Causes of Abdominal Masses by Regions

• Left Hypochondriac
  – Gastric tumors
  – Splenomegaly
  – Colonic tumors
Possible Causes of Abdominal Masses by Regions

• Umbilical
  – Small Intestinal tumors
  – Gastric tumors
  – Pancreatic tumors
  – Abdominal aortic aneurysm
Possible Causes of Abdominal Masses by Regions

- Right Lateral – Left Lateral
  - Colonic tumors
  - Renal tumors
  - Adrenal tumors
Possible Causes of Abdominal Masses by Regions

- **Hypogastric/Suprapubic**
  - In a male, causes of a suprapubic mass include:
    - urinary retention - the distended bladder is felt as a soft mass arising from the pelvis, occasionally asymmetrically; percussion note is dull and may induce an urge to void
    - rarer causes include colonic carcinoma, huge bladder tumour or stone
  - In females, causes include:
    - pregnancy
    - ovarian / uterine masses
    - urinary retention rarely
Possible Causes of Abdominal Masses by Regions

• Right Iliac
  – Cecal and ascending colon tumors
  – Appendix mass
  – Right ovarian tumors
  – Small intestinal tumors
  – Psoas abscess
  – Aneurysm iliac
Possible Causes of Abdominal Masses by Regions

• Left Iliac
  – Colonic tumors
  – Recto-sigmoid tumors
  – Constipation
  – Left Ovarian tumors
Abdominal Mass

HISTORY AND P.E.

Abdominal Wall

Intra-abdominal

Intraperitoneal

Retroperitoneal

Approached by regions

Infectious

Non-Infectious

Malignant

Non-Malignant
Diagnostic tests that may be performed are:
- Blood tests such as CBC and Blood Chemistry
- Abdominal x-ray
- Barium enema
- Abdominal Ultrasound
- Abdominal CT scan
- Angiography
- Isotope study
- EGD (esophagogastroduodenoscopy)
- Colonoscopy
- Sigmoidoscopy
urgent referral for suspected upper GI cancer

Indications for urgent referral:

- dysphagia - patient any age
- dyspepsia at any age combined if combined with one or more of the listed 'alarm' symptoms:
  - vomiting
  - proven anaemia
  - weight loss
- dyspepsia in a patient aged 55 years (see note 1) or more with at least one of the following 'high risk' features:
  - dyspepsia with onset less than one year ago
  - symptoms continuous since onset
urgent referral for suspected upper GI cancer

Indications for urgent referral:

– dyspepsia combined with at least one of the following known risk factors:
  • family history of upper GI cancer (this relates to a family history of upper GI cancer in more than 2 first degree relatives)
  • pernicious anaemia
  • Barrett's oesophagus
  • peptic ulcer surgery over 20 years ago
  • known atrophic gastritis, dysplasia, intestinal metaplasia

– jaundice
– upper abdominal mass

• Note (1) - age 55 years is considered to be the maximum age threshold. Local Cancer Networks may elect to set a lower age threshold (e.g. 50 years or 45 years).
lower GI cancer

(guidance - urgent referral for susp. ca.)

The guidelines recommend that these combinations of symptoms and signs when occurring for the first time should be used to identify patients for urgent referral under the two week standard:

All ages:
- a palpable (definite) right-sided abdominal mass
- a palpable (definite) rectal (not pelvic) mass
- rectal bleeding WITH a change in bowel habit to increased frequency of defecation and/or looser stools

Over 60 years (note 1):
- rectal bleeding persistently WITHOUT anal symptoms (note 2)
- change of bowel habit to increased frequency of defecation and/or looser stools, WITHOUT rectal bleeding and persistent for six weeks
lower GI cancer
(guidance - urgent referral for susp. ca.)

Any Age:
- iron deficiency anaemia WITHOUT an obvious cause (Hb < 11 g/dl in men or < 10 g/dl in postmenopausal women)

NB: patients with the following symptoms and no rectal mass or abdominal mass, are at very low risk of cancer.
- rectal bleeding with anal symptoms (note 2)
- change in bowel habit to harder stools and decreased frequency of defaecation
- abdominal pain where there is no clear evidence of intestinal obstruction

note 1: The age of 60 years is considered to be the maximum age threshold for this particular guidance. Local cancer networks may decide to set a lower age threshold.

note 2: anal symptoms include itching, soreness,