BMUS

BMUS RECOMMENDED GOOD PRACTICE GUIDELINES

JUSTIFICATION OF ULTRASOUND REQUESTS

Introduction

This document is intended to support primary care physicians and ultrasound providers in the appropriate selection of patients for whom ultrasound (US) would be beneficial in terms of diagnosis and or disease management.

This document has been compiled by a panel of ultrasound experts to support good practice in vetting and justifying referrals for US examinations. This document can be used to assist and underpin any local guidelines that are produced. Reference is made to iRefer and should be used in conjunction with this publication.
http://www.irefer.org.uk/

Principles

This document is based on several non-controversial principles:

- Imaging requests should include a **specific clinical question(s)** to answer , and
- Contain **sufficient information** from the clinical history, physical examination and relevant laboratory investigations to support the suspected diagnosis(es)
- The majority of US examinations are now performed by sonographers not doctors. Suspected diagnoses must be clearly stated, not implied by vague, non-specific terms such as “Pain query cause” or “pathology” etc
- Although US is an excellent imaging modality for a wide range of abdominal diseases, there are many for which US is not an appropriate first line test (e.g. suspected occult malignancy)
- Given sufficient clinical information, most NHS providers will direct US requests to CT or MR as appropriate with the agreement of local commissioners

This general guidance is based on clinical experience supported by peer reviewed publications and established clinical guidelines and pathways. Individual cases may not always be easily categorized and local arrangements for prompt access to specialist advice are essential.

Local guidelines should include identification of who justifies the referral, timescales for vetting and appropriate training for individuals undertaking this process.

Changes to guidelines and pathways should be approved by local trust governance processes. It is recommended that any referrals returned to the referrer have an accompanying letter explaining the rationale behind this. All actions should be documented and recorded on the local radiology information system.

The following examples of <u>primary care referrals</u> address the more common requests and are not intended to be exhaustive.

Clinical details	Comments	Justified
General Abdominal		
Abnormal/Altered LFTs	Refer back for further information . Need to know if the patient is symptomatic (US may be useful) or asymptomatic (US not useful) Need to know duration of abnormality.(A single episode of mild – moderate elevation does not justify an US scan) Specific LFT results must be included in the referral Needs a specific diagnosis to be considered *Footnote 1*	X
Raised ALT (other LFTs normal)	Refer back for further information US is NOT justified in patients with high risk factors (DM, obesity, statins & other medications which affect the liver) US is not justified for a single episode of raised ALT US is justified if raised ALT is persistent (3-6 months) despite following weight loss and altered lifestyle guidance, and/or change in medication US is justified in pts with persistently raised ALT (3-6 months) and no other risk factors	X X X √ √
Jaundice	Request must state whether painless or not. Overt &/or painless jaundice - new onset, cause unknown - requires urgent US and referral to 2 week wait clinic.	√
Pain (RUQ/ Iliac fossa)	Refer back for further information Generalised or localised pain as the only symptom is not a justification for US	X
Suspected gallbladder disease	Pain plus fatty intolerance and/or dyspepsia	√
Gallbladder polyp	There is little evidence to support the monitoring of small (<10mm) gb polyps.	Local guidelines should

		apply
Bloating/ Abdominal distension	As the only symptom With a palpable mass Ascites? Usually due to liver or heart failure or malignancy. Likely cause should be indicated on request: Liver/Cardiac Malignancy/cancer – CT scan	X √ ✓ X
Altered bowel habit/ Diverticular disease	US does not have a role in the management of IBS or diverticular disease. Refer back for further information (if bowel cancer is suspected then referral via the 2 week wait is indicated)	X
Diabetes	US does not have a role in the management of diabetes. Up to 70% of patients with DM have a fatty liver with raised ALT. This does not justify a scan	X
Renal Tract		
Urinary tract Infection	First episode Recurrent (> = 3 episodes in 12 months) with no underlying risk factors Non-responders to antibiotics Frequent re-infections H/O stone or obstruction	X X √ √ √
Hypertension	Routine imaging not indicated. RAS (renal artery screening) no longer offered.	Local guidelines should apply
Haematuria (Frank/Visible)	Requires 2 week wait cancer referral	√
Small Parts		
Lymphadenopathy	Patients with clinically benign groin, axilliary or neck lymphadenopathy do not benefit from US Small nodes in the groin, neck or axilla are commonly palpable. If new and a source of sepsis is evident, Ultrasound is not required.. If malignancy is suspected US +/- FNA or core biopsy is appropriate. Signs of malignancy include : increasing size, fixed mass, rubbery consistency Appropriate imaging will depend upon the nature of the suspected primary.	X
Soft Tissue Lump	2WW sarcoma referral if >5cm, tender or	X

	enlarging. <5cm stable, soft ,non-tender lumps do not warrant US	
Scrotal mass	Any patient with a swelling or mass in the body of the testis should be referred urgently.	√
Scrotal pain	Chronic (>3 months) pain in the absence of a palpable mass does not justify US Acute pain requires urgent referral.	X
?Hernia	Characteristic history, exam findings include reducible palpable lump or cough impulse. Irreducible and/or tender lumps suggest incarcerated hernia and require urgent referral. If groin pain present, clinical assessment should consider MSK causes and refer accordingly	√
Head and Neck		
Thyroid Nodule	Local guidelines may be in place but routine imaging of established thyroid nodules/goitre is not recommended. Ultrasound may be required where there is doubt as to the origin of a cervical mass ie is it thyroid in origin. Routine fine needle aspiration (FNA) of benign thyroid nodules is not indicated, FNA is reserved for when equivocal, suspicious or malignant features are detected on US. Routine follow up of benign nodules is not recommended. (Ref 5) Clinical features that increase the likelihood of malignancy include :history of irradiation, male sex, age (<20,>70),fixed mass, hard/firm consistency, cervical nodes, change in voice, family history of MEN II or papillary Ca.	X
Salivary mass	If there is a history suggestive of salivary duct obstruction, sialography may be the more appropriate initial investigation, depending on local practice. For a suspected salivary tumour, US (+/- FNA/core biopsy)is recommended. The majority of parotid tumours will be benign however US guided FNA or core biopsy is recommended when a mass is detected to exclude malignancy	
Gynaecology		
Pelvic Pain ? cause	US is unlikely to contribute to patient management if pain is the only symptom.	X

	In patients >50, the likelihood of pathology is increased, and the request may be accepted, **provided** a **specific clinical question** has been posed.	√
Pain + Palpable mass Raised CRP or WCC Nausea/Vomiting Menstrual Irregularities Dyspareunia >6 wks duration	A **specific clinical question** / differential diagnosis is required The addition of another clinical symptom justifies the request.	√
Pain + H/o ovarian cyst H/o PCOS Severe' or 'Sudden' pain Loose stools Rule out or ?appendicitis Rule out or ?ovarian cyst Rule out or ?anything else	See above. These do not represent further clinical symptoms, and the request should be referred back. Vague 'notions' of a diagnosis with no real basis, or requests for purposes of reassurance should be rejected pending more information	X
Bloating	Refer back for further information. **Persistent** bloating ***with the addition*** of other symptoms, such as a palpable mass/ raised Ca	X √

	125, is acceptable. A **specific clinical question** is required. Intermittent bloating is not acceptable. (CT may be the preferred test in GI tract related symptoms, and further clinical info is required.)	 √ X
Follow-up of benign lesions e.g. fibroids, dermoids, cysts	There is no role for US in follow-up or in treatment monitoring. If the pt has undergone a **clinical change**, then re-scan is acceptable	X √
PMB	Should include information about the LMP (i.e. be post rather than peri-menopausal) And relevant HRT status. Local pathways which include direct referrals into gynaecology under a 2WW are most appropriate. Scan with view to progress to hysteroscopy is recommended pathway	√
PCOS	Only useful in secondary care if investigating infertility diagnosis of PCOS should be based on: 1. Irregular menses. 2. Clinical symptoms and signs of hyperandrogenism such as acne, hirsutism. 3. Biochemical evidence of hyperandrogenism with a raised free androgen index (the testosterone is often at the upper limit of normal) 4. Biochemical exclusion of other confounding conditions	X

Footnotes:

1 Liver Function tests - Isolated enzyme rises –US generally not indicated

ALT alone: Fatty liver (risk factors; obesity, hyperlipidaemia, DM) or Drugs (statins/ OC)

ALP alone: probably bone NOT liver (adolescent growth, Paget's disease, recent fracture)

GGT alone: usually alcohol. Consider prescribed drugs. Fatty liver (risk factors; obesity, TGs, DM)

AST alone: Muscle injury or inflammation.

Bilirubin alone: Gilberts syndrome (usually <80mols/L)

REFERENCES:

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4. Fraser A. Interpretation of liver enzyme tests – a rapid guide. NZFP; 34, 3: 2007