Reviewer’s report

Title: Non opaque soft tissue foreign body: Ultrasonographic findings

Version: 1 Date: 26 October 2010

Reviewer: Americo Testa

Reviewer’s report:

Thanks for the opportunity to review your Manuscript.

The employment of US technique by an expert radiologist is proposed to assess foreign bodies retained in soft tissue due to penetrating trauma. A consecutive series of 47 patients suspected for retained non radio-opaque foreign body are tested.

The paper addresses a frequent and relatively important clinical condition in emergency room and emphasizes the role of bedside US, as increasingly used by the emergency physician, in the initial assessment of the patient since it provides an effective, non invasive and low cost examination.

I recommend the following modifications:

MAJOR COMPULSORY REVISIONS

General

The English language is unsatisfactory. Major review to correct word usage, grammar, spelling and the use of capital letter is recommended!!

Specific remarks by sections:

Methods

2nd paragraph: there is a mistake in the number of male and female patients: 44+13=57 instead than 47! This should be corrected.

3rd paragraph: it should be important to know the total number of patients, with suspected foreign body retained that underwent to plain X-ray, among which the 47 patients of the study have been selected. Otherwise it seems that in any case the X-ray cannot detect foreign bodies, while in Background it is cited a X-ray negative predictive value of 53.7% and an overall sensibility of 80% (Discussion section). Moreover it should be useful to know the accuracy of ultrasound examination, if this one has been performed blind, even in cases in which the X-ray is positive (radio-opaque foreign body), in order to compare correctly the two techniques.

Results

3rd paragraph: The sum of patients in whom a foreign body was detected is 50. I
think that this could be explained by detecting of several foreign bodies in the same patient. However this point should be defined. The type of foreign body, its mean measure and the body site location could be expressed in a summarizing table.

Discussion

All the organization of this section should be reviewed. Results should be discussed in a systematic way soon after the introduction of this section and a comparison with other trails cited in Literature should be added.

MINOR ESSENTIAL REVISIONS

Background

The 2nd paragraph represents a consequence of what is written in the 3rd paragraph, so maybe is advisable to put it after: “However, 38% of such foreign...”

Discussion

Ultrasound technique limits should be better defined (difficult sites of evaluation, air or gas contamination, other materials etc.) and clarified the role of acoustic shadowing (5th paragraph).

MR imaging should be discussed more in detail and the limits of its use in ER emphasized.

6th paragraph: the sentence “In conclusion, sonography has a definite advantage...” is only a repetition here because this one has been already quoted in the Conclusion section.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.