Reviewer's report

Title: Assessment of Preoperative Exercise Capacity in Hepatocellular Carcinoma Patients with Chronic Liver Injury Undergoing Hepatectomy

Version: 1 Date: 28 January 2013

Reviewer: Ajith Siriwardena

Reviewer's report:

This study is a single centre cohort report of the use of pre-operative cardiopulmonary exercise testing to predict outcome in a series of patients undergoing liver resection for hepatocellular carcinoma (HCC) complicating chronic liver disease.

Introduction

This is well-written and clear. The sentence “In elderly patients undergoing major abdominal surgical procedures, almost all postoperative cardiopulmonary deaths occur in patients with an anaerobic threshold (AT) of <11 ml/min/kg” is slightly mis-leading as cardiopulmonary deaths can occur as a result of operative complications. Thus the sentence should be modified and simply state that the majority of deaths from cardiopulmonary complications occur in patients with an anaerobic threshold <11ml/min/kg.

Abstract

• There is no strong evidence that exercise therapy can modify CPET parameters and the reference to this in the text should be removed “ Improvement of preoperative exercise capacity in patients with chronic liver injury may improve postoperative Prognosis”.

Methods

• In table 1 the term NBC should be explained. There are a series of unexplained abbreviations and there should be a table 1 legend.

• It is not clear whether the population is the 66 patients who underwent resection or the 56 from the authors' institution. Reading the paper, the population is really 61 patients– please clarify.

• 56 patients were Child-Pugh A and 5 were B. What about the other 5 patients?

• Please provide information on the tests used to diagnose these tumours: number undergoing MR scan and findings and also AFP levels.

• The phrase “all patients were doing well at time of discharge” is not clear and should be more professionally expressed as “no in-patient mortality” – if that is what the authors are trying to say.

• The section on liver resection terminology is baffling. Simply use the Brisbane terminology; get rid of extended hepatectomy – and refer to this as right trisectionectomy with similar for left and for smaller resections, the correct term is
non-anatomical, sub-segmental resection.

• One senior pathologist should read “one attending or consultant pathologist” – his age and seniority are immaterial.

• If post-operative complications were not recorded prospectively, this should be reported. If a system such as that of Dindo-Clavien was not used for assessment of complications, this should be mentioned.

Results

• Table 3 is un-necessary and detracts from table 2 – please remove but refer to it in the text.

• Table 5 should also be deleted and simply referred to in the text.

• The implication that exercise therapy can improve CPET is not substantiated and should be removed.

Level of interest: An article of importance in its field

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.