Reviewer's report

Title: Effect of physical training on airway inflammation in bronchial asthma: a systematic review

Version: 3 Date: 5 February 2013

Reviewer: Tomasz Grzelewski

Reviewer's report:

Major Compulsory Revisions
No

Minor Essential Revisions
yes - below

This is an truly excellent review, overwhelming, beautiful idea and performance - however with one serious mistake! - drug treatment introduction is so poorly written and needs to be changed! The rest is already the real new nice history of medicine!

1. Is the question posed by the authors well defined? yes
2. Are the methods appropriate and well described? yes
3. Are the data sound? yes
4. Does the manuscript adhere to the relevant standards for reporting and data deposition? yes
5. Are the discussion and conclusions well balanced and adequately supported by the data? yes
6. Are limitations of the work clearly stated? yes
7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished? yes
8. Do the title and abstract accurately convey what has been found? yes
9. Is the writing acceptable? yes

But look for Page 2!!

„Anti-inflammatory pharmacological agents like inhaled steroids and anti-leukotrienes are the mainstay of asthma treatment. „ What about long acting B2-mimetics?? Mixed aerosols (glucocorticosteroids and long acting B2-mimetics?). This is the mainstay now! Not far to look for professional competitors treated with this drugs! Read carefully guidelines and usual press and find please...
“there are currently no medications that can alter the natural history of the disease” how about omalizumab?? !!!Immunotherapy??? !!! This is not serious scientific sentence please keep your mind to main guidelines of treatment - any : GINA, Naep etc. Be careful!

“Potential long term side-effects” – I strongly disagree with this generalization, which drugs you mean? Steroids in inhalations (ICSs) ? No long term effects which are serious in normal doses. LABAs – if taken with ICSs – breakthrough in therapy now, no side effects serious in most of the studies, ! LTRAs (e.g. montelukast) - the same! Please concentrate, focus and read more studies before you wright any sentence especially on that topic.

“Most importantly, even to the newer asthma therapies, only a very small subpopulation appears to respond and hence we urgently need an integrated approach to asthma therapy.(13;14)” Which therapy you mean ? be specific please ? montelukast?? Maybe.. howecer read more studies of e.g. discuss the study from Stelmach I JACI 2008-2009 on montelukast action in EIB in children - You can change your mind a bit on montelukast, similarly look for studies of Szefler..and others , please. This part regarding treatment is very very shallow and too much generalized, not entire truth, or, 1/3 rd of thre truth…please do your best!

reference 13 - this touches refractory/severe asthma , put specific description on that facts, do not generalize , do not simplify treatment issues, this is too dangerous in review papers, be true and specific! Keep with the facts from guidelines again please… treatment, proper one, in asthmatic athletes or patients is 60% of success.. the rest lays in exercise what you beautifully prove!

The rest of the article is excellent, perfect, congratulations on that ! At the end – I am sad and frightened and surprised a lot that it exist only so small number of studies regarding the real effect of aerobic exercise alone or in combination with drugs on asthma improvement! But you prove this is the sad truth (I’ve checked the bases and fully support your findings, it is a shame there are no studies to find!). So we need 1000% more studies at last to check the truth! Nice conception! Thank you dear authors!

I was very happy and proud to read your findings. Almost, almost there for me! This paper will have many, many, many citations!

Kind regards – your reviewer (95% happy with this manuscript –please improve treatment in introduction).

Discretionary Revisions

no
Level of interest: An exceptional article

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests