

CORRESPONDENCE

The European Community Respiratory Health Survey II

To the Editor:

The European Community Respiratory Health Survey (ECRHS) II is a multicentre study that includes assessment of bronchial responsiveness using the MefarTM dosimeter (MefarTM, Brescia, Italy). WARD *et al.* [1] report that in some centres taking part in ECRHS II, there is potential for systematic variation in MefarTM dosimeter driving pressure, which constitutes possible significant confounding for between-centre comparisons of bronchial hyperresponsiveness. They reported a wide range of driving pressures between centres "ranging between 70–245 kPa, with most outside the quoted manufacturer's specification of $180 \pm 5\%$ ".

WARD *et al.* [2] drew our attention to this problem when we were developing the quality control programme for ECRHS II. All ECRHS II centres were requested to check dosimeter driving pressure at least once a month and to send reports to the Coordinating Centre. Where readings were <160 kPa or >180 kPa, centres were advised to adjust the dosimeter to a level within these limits. R.J. Ward and his group set up a website with instructions on how this could be achieved, together with information on the testing procedure.

Reports were received from all centres except for Umea (Sweden) and showed that no centre recorded a level <160 kPa and the highest value was 200 kPa, found in Hamburg (Germany). In Hamburg, alterations were made to the equipment and it operated at ~180 kPa for the rest of the study. The mean pressure for centres throughout the study ranged 160 kPa–189 kPa (Hamburg had a higher mean due to its driving pressure being 200 kPa for a period).

Although table 1 of the paper concerned [1] implies a substantial problem within the participating European Community Respiratory Health Survey II centres, the quality control programme reveals that although variation exists, the magnitude and its influence on between-centre comparisons is much smaller than suggested by WARD *et al.* [1] in their recent paper.

J. Knox, D. Jarvis, on behalf of the ECRHS II Steering Committee

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References

1. Ward RJ, Ward C, Johns DP, Skoric B, Abramson M, Walters EH. European Community Respiratory Health

Survey calibration project of dosimeter driving pressures. *Eur Respir J* 2002; 19: 252–256.

2. Ward RJ, Liakakos P, Leonard RF, Reid DW, Johns DP, Walters EH. A critical evaluation of the MefarTM dosimeter. *Eur Respir J* 1999; 14: 430–434.

From the authors:

The letter from J. Knox and D. Jarvis about the outcome of the dosimeter quality control programme for the measurement of bronchial hyperresponsiveness in the European Community Respiratory Health Survey (ECRHS) II is reassuring. Although our initial worries about excessive variation between MefarTM dosimeter (MefarTM, Brescia, Italy) driving pressures from our own observations [1, 2] do not seem to have been confirmed in most of the ECRHS centres, the value of the quality control programme does seem to have been validated.

Although the variations in driving pressures reported to the Coordinating Centre were not as great as we had observed with a number of dosimeters from a small number of international centres, the range of mean pressures quoted still seems to be outside the manufacturer's specifications of $180 (\pm 5\%)$ kPa. We made a proposal to the ECRHS II for our laboratory to act as a "neutral" and a confidence reference agency to collect and collate the calibration information obtained by study centres following the instructions we provided on our website. For the sake of complete objectivity, it is perhaps a pity that this did not occur. Even so, we are pleased that our work to highlight a potential difficulty with the MefarTM dosimeter has been very worthwhile, and will certainly have even greater confidence in the data generated by ECRHS II.

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References

1. Ward RJ, Ward C, Johns DP, Skoric B, Abramson M, Walters EH. European Community Respiratory Health Survey calibration project of dosimeter driving pressures. *Eur Respir J* 2002; 19: 252–256.
2. Ward RJ, Liakakos P, Leonard RF, Reid DW, Johns DP, Walters EH. A critical evaluation of the MefarTM dosimeter. *Eur Respir J* 1999; 14: 430–434.

Chronic obstructive pulmonary disease: underdiagnosed, underinvestigated, inappropriately managed?

To the Editor:

The article of RENNARD *et al.* [1] and the accompanying editorial by DEKHUIZEN [2] proposed that chronic obstructive pulmonary disease (COPD) is not only underdiagnosed

and underinvestigated but also that the morbidity is underestimated. The evidence on which they base this hypothesis lacks two essential components. These are independent assessments of exercise tolerance and objective measurement of lung function. If disability is primarily to be attributed