



LJMU Research Online

Augustine, DX, Coates-Bradshaw, LD, Willis, J, Harkness, A, Ring, L, Grapsa, J, Coghlan, G, Kaye, N, Oxborough, D, Robinson, S, Sandoval, J, Rana, BS, Siva, A, Nihoyannopoulos, P, Howard, LS, Fox, K, Bhattacharyya, S, Sharma, V, Steeds, RP, Mathew, T and British Society of Echocardiography Education Committee,

Echocardiographic assessment of pulmonary hypertension: a guideline protocol from the British Society of Echocardiography.

<http://researchonline.ljmu.ac.uk/id/eprint/9153/>

Article

Citation (please note it is advisable to refer to the publisher's version if you intend to cite from this work)

Augustine, DX, Coates-Bradshaw, LD, Willis, J, Harkness, A, Ring, L, Grapsa, J, Coghlan, G, Kaye, N, Oxborough, D, Robinson, S, Sandoval, J, Rana, BS, Siva, A, Nihoyannopoulos, P, Howard, LS, Fox, K, Bhattacharyya, S, Sharma, V, Steeds, RP, Mathew, T and British Society of

LJMU has developed **LJMU Research Online** for users to access the research output of the University more effectively. Copyright © and Moral Rights for the papers on this site are retained by the individual authors and/or other copyright owners. Users may download and/or print one copy of any article(s) in LJMU Research Online to facilitate their private study or for non-commercial research. You may not engage in further distribution of the material or use it for any profit-making activities or any commercial gain.

The version presented here may differ from the published version or from the version of the record. Please see the repository URL above for details on accessing the published version and note that access may require a subscription.

<http://researchonline.ljmu.ac.uk/>

For more information please contact researchonline@ljmu.ac.uk

<http://researchonline.ljmu.ac.uk/>

ERRATUM

Echocardiographic assessment of pulmonary hypertension: a guideline protocol from the British Society of Echocardiography

Daniel X Augustine MD^{1,*}, Lindsay D Coates-Bradshaw², James Willis PhD¹, Allan Harkness MSc³, Liam Ring⁴, Julia Grapsa PhD⁵, Gerry Coghlan MD⁶, Nikki Kaye⁷, David Oxborough PhD⁸, Shaun Robinson MSc⁹, Julie Sandoval¹⁰, Bushra S Rana FRCP¹¹, Anjana Siva¹², Petros Nihoyannopoulos MD¹³, Luke S Howard DPhil¹⁴, Kevin Fox FRCP¹⁵, Sanjeev Bhattacharyya MD¹⁶, Vishal Sharma MD^{17,†}, Richard P Steeds MD¹⁸ and Thomas Mathew^{2,†} on behalf of the British Society of Echocardiography Education Committee

¹Royal United Hospital Bath NHS Foundation Trust, Bath, UK; ²Nottingham University Hospitals NHS Trust, Nottingham, UK;

³Colchester Hospital NHS Trust, Colchester, UK; ⁴West Suffolk Hospital NHS Trust, Bury St Edmonds, UK; ⁵Hammersmith Hospital, Imperial College London, London, UK; ⁶Royal Free London NHS Foundation Trust – Cardiology, London, UK; ⁷West Suffolk NHS Foundation Trust, Bury Saint Edmunds, UK;

⁸Liverpool John Moores University, Research Institute for Sports and Exercise Physiology, Liverpool, UK; ⁹Papworth Hospital NHS Foundation Trust, Cambridge, UK; ¹⁰Leeds Teaching Hospitals NHS Trust, Leeds, UK; ¹¹Papworth Hospital, Cambridge, UK; ¹²Queen Alexandra Hospital, Portsmouth, UK;

¹³Imperial College London, NHLI, National Heart & Lung Institute, London, UK; ¹⁴Imperial College London, National Pulmonary Hypertension Service, London, UK; ¹⁵Hammersmith Hospital, London, UK; ¹⁶St Bartholomew's Hospital, Barts' Heart Centre, London, UK; ¹⁷Royal Liverpool and Broadgreen University Hospitals NHS Trust, Liverpool, UK; ¹⁸University Hospital Birmingham and University of Birmingham, Birmingham, UK

Correspondence should be addressed to D X Augustine: daniel.augustine@nhs.net

*(D X Augustine is the Lead Author)

†(Guideline Chairs: V Sharma and T Mathew)

The authors and journal apologise for an error in the above paper, which appeared in the September 2018 issue of *Echo Research and Practice* (volume 5, pages G11–G24, <https://doi.org/10.1530/ERP-17-0071>).

The error relates to the calculation of RVSP given on page G13. The original text stated:

‘When estimating right ventricular systolic pressure (RVSP) from the TRV using the Bernoulli equation, the TRV is squared and multiplied by 4, so even small errors in the absolute measurement of TRV can result in significant changes to the estimate of RVSP. Secondly, in order to obtain an estimate of PASP, the RVSP needs to be added to an estimate of the RAP derived from measurement of the inferior vena cava (IVC) dimensions and response to inspiration. However, in many patients, IVC dimensions cannot be obtained and even in those where measurement is possible, the accuracy between echo estimation of RAP and invasive measurement is as low as 34%’.

This should have stated:

‘When estimating the peak pressure difference between the right ventricle (RV) and the right atrium (RA) from the tricuspid regurgitation velocity (TRV) using the simplified Bernoulli equation, the TRV is squared and multiplied by 4, so even small errors in the absolute measurement of TRV can result in significant changes to the estimation of the RV-RA pressure gradient. Secondly, in order to obtain an estimate of pulmonary artery systolic pressure (PASP), an estimate of the right atrial pressure (RAP) (derived from measurement of the inferior vena cava (IVC) dimensions and response to inspiration) needs to be added to the estimate of the RV-RA pressure gradient. However, in many patients, IVC dimensions cannot be obtained and even in those where measurement is possible, the accuracy between echo estimation of RAP and invasive measurement is as low as 34%’.