

Letter to the Editor

Every X-ray needs an indication!

Keywords: Chest X-ray; cardiac surgery; congenital heart disease

Received: 14 October 2010; Accepted: 30 January 2011; First published online: 22 February 2011

Dear Sir,

As a consequence of the findings described in the paper by Bosse et al,¹ we changed our departmental practice to avoid routine discharge X-rays without further clinical indication.

We performed a follow-up audit that included again 100 consecutive children who underwent cardiac surgery between 2 December, 2009 and 10 May, 2010.

Our review showed that discharge chest X-rays, defined as X-rays performed for 3 days or less before discharge from hospital, were still performed in 29 of 100 consecutive children – 29%, previously 71%¹ – who underwent cardiac surgery.

Discharge X-rays were performed on average 10.1 days after surgery, while the previous radiograph had been performed 3.1 days before that. Furthermore, the delay between the discharge X-ray and the day of discharge from hospital was only 1.4 days. On average, each of the 29 patients had undergone a total number of 6.4 chest X-rays during 11.2 days in hospital after surgery.

In 13 patients – 13%, previously 33%¹ – a chest X-ray was taken without any specific medical

question and therefore performed as a routine, while in 16 patients – 16%; previously 38%¹ – chest X-rays were performed with a clear clinical indication. Only three of these clinically indicated radiographs resulted in therapeutic changes. It is notable that the percentage of routinely performed chest X-rays of all radiographs before discharge did not change in the follow-up study – 45%, previously 46%.¹

Despite chest X-rays being hardly performed without clear clinical indication, there is still room for further improvement. Clinicians need to make sure that an appropriate indication for use of ionising radiation is given.

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Reference

1. Bosse K, Krasemann T. Is a routine chest X-ray indicated before discharge following paediatric cardiac surgery? *Cardiol Young* 2009; 11: 1–2.

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