CT cystography for evaluation of augmented bladder perforation: be safe and know the limitations

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Sir,

I have read with interest the review paper of Breen et al. [1] on imaging of augmented bladder. The authors justly centered on imaging of perforated bladder, the most dreadful complication. We agree with the authors that the study of choice is CT cystography.

We would like to add a few important points related to the safety of the study and its limitations. The filling of the bladder should be performed using low pressure technique. The augmented bladder compliance may decrease with time and there are case reports on perforation of the augmented bladder at about 50 cm H₂O [2, 3]. In our practice, the bag of contrast is hung at 20 cm above the table level. In addition, the bladder filling is discontinued if the child complains of any discomfort or pain.

Bladder perforation may be sealed by the time the CT cystography is performed. In our experience, only 74% of patients demonstrated contrast extravasation with CT cystography. Therefore, radiologists should be aware of secondary signs of bladder perforation such as moderate or large pelvic fluid and pneumoperitoneum that cannot be explained by other pathology (e.g., perforated bowel, recent surgery or

large pneumomediastinum) [4]. In patients with increased or new pelvic fluid with no other imaging findings of bladder perforation, US-guided tapping of the fluid with high creatinine level is diagnostic for perforation.

Compliance with ethical standards

Conflicts of interest The author reports no conflicts of interest.

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