

## **Assessment and management of computed tomography contrast-induced allergic reactions: Experiences of diagnostic radiographers in Ghana**

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### **Title**

## **Assessment and management of computed tomography contrast-induced allergic reactions: Experiences of diagnostic radiographers in Ghana**

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### **Background**

Radiographers play a crucial role in preparing and administering contrast media (CM) during computed tomography (CT) examinations, including providing pre-medication to patients at risk of hypersensitivity reactions to CM. However, there is a lack of research investigating the experiences of radiographers in Ghana in recognising and managing common allergic-like reactions related to contrast media during CT examinations.

### **Methodology**

This study employed a quantitative cross-sectional design involving licensed radiographers who perform CT examinations. A self-structured questionnaire was administered and completed by the radiographers, including demographics, the types of contrast media agents used, experiences in managing contrast-induced allergic-like reactions, and proficiency in recognising and managing such reactions.

### **Results**

Ninety radiographers participated in the study. Most [80 (69.6%)] reported using non-ionic low osmolar CM for CT examinations. 61.1% (n=51) of the radiographers had received post-

undergraduate qualification training on managing allergic-like contrast reactions. Of those who had received training, 40 (63.5%) attended in-house training or workshops, while only 6 (9.5%) underwent formal postgraduate education. The most frequently reported mild allergic-like reaction was nausea/vomiting [59 (29.6%)], whereas hypotension was identified as the most common severe allergic-like reaction experienced [22 (44.9%)]. Additionally, 58 (64.4%) of the radiographers indicated that their departments routinely evaluated patients for risk factors and allergies prior to administering CM. 47.8% (n=43) believed screening patients for pre-existing allergies was the most effective preventive measure for contrast reactions.

### **Conclusion**

The study revealed that radiographers possessed a fair understanding of recognising and managing hypersensitivity reactions to CM. However, deficiencies were identified in their ability to effectively manage severe reactions. Further training for radiographers may be necessary for adequate recognition and management of CM reactions.

### **Reference**

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- Singh, V. and Sandean, D.P. (2021) 'CT Patient Safety And Care'.