

Study

Study on the Microbial Safety of an Infusion Set for Contrast-Enhanced Imaging

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Objectives

Multiple uses of automatic contrast injection systems may impose septic risks on patients. The purpose of this experiment was to verify whether a newly developed replaceable patient-delivery system may allow multiple uses of the system but without such risks.

Highlights

- It (Transflux) has been applied for several years in many radiology departments without any contaminative infections reported.
- The high capacity of injection syringes allows successive administrations for multiple cases. Only the device or part in direct contact with the patient, the tubing and connector, is replaced between examinations. This practice can not only reduce the waste of contrast agent and injectors or syringes, but also save the time otherwise consumed by assembling injector and reloading syringes.
- In addition, this delivery system is connected with the patient line through a releasable connector. The released position of this releasable connector permits a backflow from the patient during the vein cannulation before connecting to the main injector set, which minimizes extravasations problems. The cost of Transflux contrast delivery system is approximately only one-tenth of that for the entire injector system. The introduction of the Transflux delivery system as a "safety zone" avoids the need to change power syringes for each patient procedure by eliminating the risk of contamination of the injector system. For successive patient studies, the "safety zone" and the patient line must be changed but the main injector system can be used for multiple examinations.

CONCLUSION

This study proves the convincing advantage of using the Transflux patient-delivery system in terms of microbial safety and cost-benefits. This system allows safe multiple use of the automatic injector system for several patients without risk of contamination and extravasation but with improved clinical efficiency. In addition, it reduces unnecessary waste of contrast media with each patient procedure and of the costly automatic injector systems.

Report

Transflux at King's College Hospital - a follow up report after two years use

The two CT scanning suites at King's examine more than 90,000 patients every year and the Transflux system has continued to meet expectations. Contrast usage has been significantly reduced, with virtually no wastage and a dose per patient reduced to at least 75% of that delivered by traditional methods.

The resultant cost saving on consumables has been estimated at £46,000 per year. This money has been used to enhance the patient experience.

An unexpected bonus is that the radiographers overwhelmingly prefer Transflux because patient prep is much faster and fuss free compared to the repeated exchange of syringes for each new patient.

Being a large London Teaching Hospital there is a significant number of staff rotating through CT and with this in mind the system has proved safe to use with no incidents of any cross infection, emphasised by a rigorous study conducted at Leuven University Hospital, which confirms that the Transflux system is completely safe to use.

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