Syringeless contrast injectors may improve outpatient CT workflow and reduce CM wastage

CT Exprès™ is the injector of choice to deliver improved workflow and efficiency while avoiding CM wastage

A new study being published in the Journal of American College of Radiology demonstrates that the syringeless power injectors may deliver improved workflow and efficiency and allow approximately 11-mL CM saving per examination over the dual-syringe injector.¹

The purpose of the study was to compare enhancement quality, performance efficiency, technologists’ satisfaction, and operation costs between 2 different power injectors in an outpatient setting.

According to this study, “contrast-enhanced CT accounts for approximately 40 to 60 percent of exam volume, and requires additional steps and time beyond unenhanced studies.”¹ For this reason any improvement regarding the delivery of contrast media has a positive impact on the efficiency of the departments.

CT Exprès™ outperforms dual-syringe system

A prospective study has been designed by Xiaozhou Ma, MD, and colleagues from the department of abdominal imaging and intervention at Massachusetts General Hospital in Boston.¹

275 consecutive outpatients were randomized and assigned to one of two CT scanners, either a dual-syringe or CT Exprès™.

The factors that have been rated during this study are the quality of contrast enhancement, the equipment preparation time, releasing time, contrast media wastage and technologists’ satisfaction.

The study demonstrates that the quality of contrast enhancement is comparable between the two injectors. The preparation and release times per examination were shorter for the CT Exprès™, and no contrast media wastage has occurred with the syringeless system, allowing 11 mL saving per exam when compared with the dual-syringe PI.¹

Moreover, the study also mentioned that, “a total of 135 patients scanned using the syringeless PI had a total savings of CM of about 1.485 mL, for a total of about $267.”¹

As the use of the CT Exprès™ is flexible and quick, the number of patients being scanned is more important and an additional 2.6 patients per day can be examined.¹
As concluded by MD Ma and colleagues “The syringeless PI is more user-friendly, improves outpatient CT workflow, and allows approximately 11-mL CM saving per examination over the dual-syringe injector.”¹

As a result, the syringeless system was “rated higher for overall operator satisfaction, with an average score of 9.3 on a 10-point scale, compared with 6.3 for the dual-syringe system (P<.01)”².


About CT Exprès™

A unique 3-channel syringeless contrast media CT scanner injector

The CT Exprès™ offers a way to control contrast utilization. The system represents significant advances in cost management, workflow, automation and flexible programming. These factors make CT Exprès™ an ideal cost management and patient care enhancing tool for the radiology practice. The CT Exprès™ represents a completely new approach to the delivery of contrast media and the use of disposables which simplifies the preparation of the injector.

Safety combined with a non-time-consuming preparation is a major issue in the daily routine. With CT Exprès™, contrast media is drawn directly from the contrast media bottles. Therefore there is no need to recharge syringe or make replacement in-between patients.

There is less manipulations required for each procedure, change over from patient to patient is dramatically shortened that helps to increase safety and the workflow resulting in the ability to see more patients each day.

The patient and procedure driven approach of the CT Exprès™ helps to reduce the waste of contrast media. Through the flexible contrast media reservoir the multi dosing capabilities result into the right dosage for each patient and procedure. The use of larger contrast media bottles reduce cost as well. Furthermore, the automatic saline flush feature allows for no residual contrast media left in the tubing.

Since the multidosing capability is flexible, the user can tailor the volume of delivery to the specifics of the patient, without waste. This also appeals to the technical X-ray professionals who may be interested in dosing, based on patient weight or condition.

Having two fluid sources provides greater flexibility for the professional to multidose, or to incorporate automatic saline flush along with injection.

Finally, because the system uses no syringes, there is a saving of labor and potential waste. The result is more efficient imaging operation. The flexibility to incorporate new protocols for better patient care and higher throughput, adds up to greater profit for the scanning center.