Singapore Healthcare Management 2015

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TO REDUCE THE DEGREE OF UNNECESSARY INTRAVENOUS CANNULATION IN INVASIVE CARDIAC LABORATORY (ICL)

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AIMS:

It is routine practice to insert intravenous cannulas (IVCs) in all patients undergoing elective angiogram in the ICL day ward. We aim to determine the incidence of unused IVCs during coronary angiograms and set up criteria to reduce unnecessary insertions.

METHODS:

Data from 155 outpatients listed for coronary angiogram between Jan 2015 to April 2015 were collected.
Control group: 68 patients listed on Tuesdays and Thursdays acted as the control group, where all received IVCs as per current practice.
Study group: The 87 patients listed on Mondays, Wednesdays and Fridays acted as the study group. 35 patients fulfilling the inclusion criteria were cannulated, Table 1. The rest of the 52 patients did not have IVCs in the day ward and were cannulated only when clinically indicated inside the cathlab (such as proceeding to angioplasty or requiring IV fluids).
Data was analysed to determine the number of cannulas not used in both groups, and the number of cannulas subsequently required in the study group.

Inclusion criteria for IV cannulation

- Staged PCI
- Aortic Stenosis
- Renal Failure (eGFR<60ml/mt)
- Low BP (SBP<100)
- Anti-platelets/Contrast Allergy
- CTA Positive

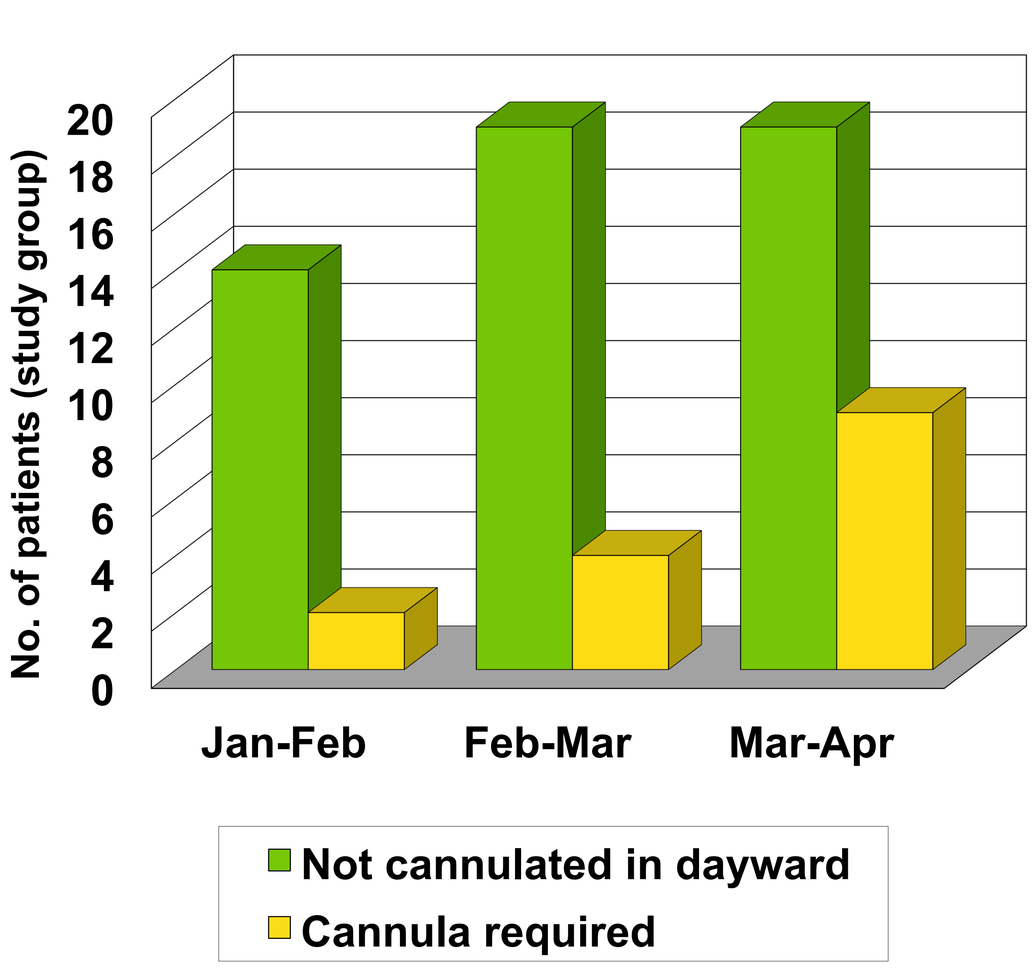
Table 1.

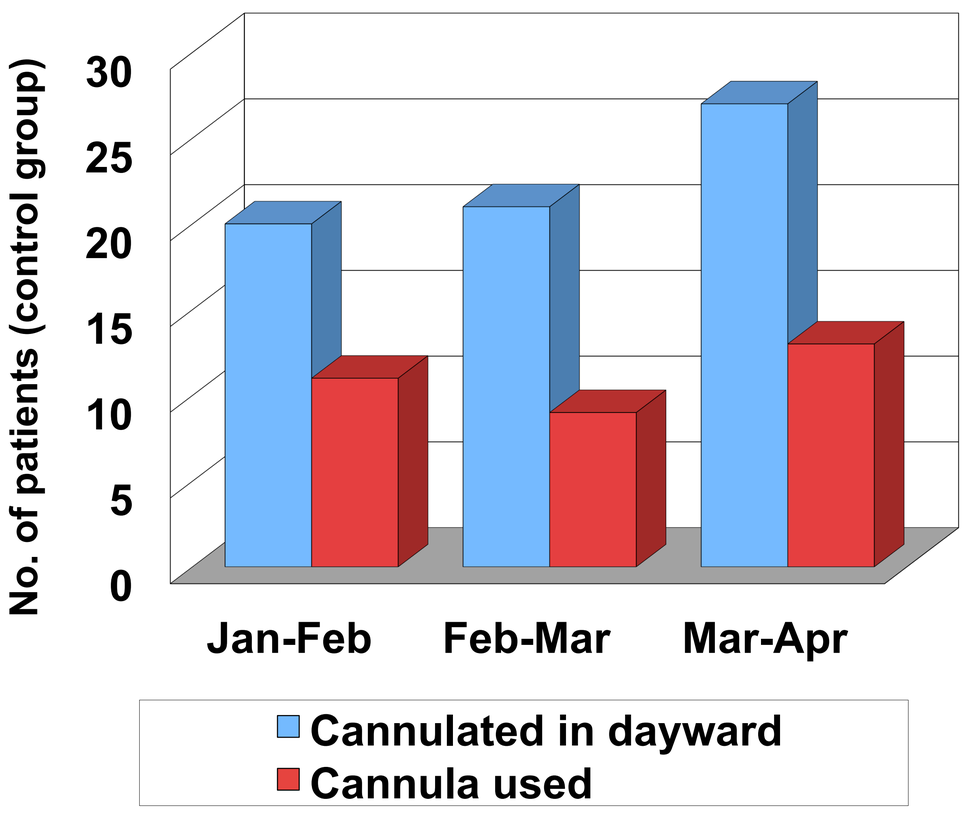
RESULTS:

In the control group, 35 (51.5%) of the 68 IVCs inserted prior to the angiogram were not used.

In the study group, out of the 52 patients who were not cannulated pre-procedurally, 37 (71%) patients did not require IV access, while only 15 (29%) of the patients required IVCs inside the cathlab. All cannulas were inserted uneventfully.

In the study group, out of the 35 patients who were cannulated pre-procedurally, 19 (54%) IVCs were used.





CONCLUSION:

By adopting a simple set of clinical criteria, the number of day ward IV cannulations was reduced by 42.5%.
There is a high incidence of unused IVCs inserted for coronary angiograms. Unnecessary IVCs should be avoided to reduce wastage. Patients also suffer less from the pain and anxiety associated from IV line insertions. This may also reduce IV access complications like phlebitis and haematoma.
More efforts should be done to assess the benefits of clinically indicated IV cannulation over routine insertion in day case coronary angiograms.