## Background: Retention of Tourniquet Result could be fatal



# Tourniquet with Safe Link System

- Aim: To eliminate the risk of retention of tourniquet by a safe-link mechanism in blood taking and intravenous cannulation procedures.
- Method:
  - 1) To design safe linking system (a plastic coil string to the tourniquet) between patient's limb and phlebotomist during procedures
  - 2) To document tourniquet removed after the procedures.
- Infection control Measures:
  - **For Tourniquet**
  - Tourniquet should be discarded every week or when visibly soiled.
  - For the extension plastic coil string
  - Should be cleaned and disinfected before and after the procedure or when soiled.
- Trial run the safe-link system in March 2013 and evaluation was analyzed.
- Full implement the safe-link system among the phlebotomists in July 2013.

#### Place in a plastic bag to keep away from contacting the staff

Label with staff name and start date.

Apply on patient's limb. Visible & Self-Alert.















Clean the string by alcohol wipe before and after the procedure. Retention of tourniquet is avoidable.

Simple and effective.



### 風險管理系列 (I)



NDH CPT 22 July 2013

# **Evaluation**

• Phlebotomists welcomed the system served the purpose of eliminating the risk of tourniquet retention by:

1. Visual checking of the prominent link and immediate reminder were effective.

2. Feeling the link if still connecting to the patient when the phlebotomist left unintentionally.

3. **Documentation** of removal of the tourniquet.

- Retrospective audit on documentation & Surprise audit on the usage during July 2013 till January 2014; the compliance rate was 100%.
- No incident of retention of tourniquet was reported by the phlebotomists since July 2013.
- In the long run, auto alarming system on the tourniquet will be explored in the future.