Drain Removal Assured by Initiative “Record Details of Drain Inserted in Operating Room” No Question of Retention
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Introduction
Seven in 72 cases (10%) which were related to retained fragment of drains were identified at the Hospital Authority Risk Alert in recent five years. Among all cases, drains were broken during their removal, leaving a drain fragment in the wound unintendedly. There have been several publications describing the risk mitigation recommendations to address the drain retention problems. In order to minimize the risk of retained segments of drain upon removal, hospitals should take these recommendations into consideration to enhance the patient safety.

Objectives
To assess the feasibility of the risk mitigation recommendations, implement these recommendations in Operating Room and formulate the risk management strategies for further improvement.

Methodology
A workgroup which composed of multi-specialties surgeons and perioperative nurses was formed. Two risk mitigation recommendations were feasible to implement, which were (1) to minimize or avoid the cut of drain during drain placement; (2) to record the drain details intraoperatively, including the number of side holes left and the length of the drain inserted, the details acted as a reference to facilitate checking of completeness after removal. The “Guideline on Recording Details of Drain Inserted in Operating Room” was set up. The implementation of recording details of drain inserted was rollout among all specialties in April 2017.

Result
The evaluation of Perioperative Nursing Record was performed from April 2017 to June 2017. For minimizing or avoiding the cut of drain, the results showed that 17% of the drain cut could be minimized, and 7% of the drain cut were unavoidable. To the way forward, we would improve the percentage of non-cut drain from 77% to 93% by introducing some tailor-made drains with end marking. Regarding the recording details of drain in Operating Room, the results were encouraging. 93% of the documentation about recording details of drain was correct. Moreover, only 3 in 382 cases (0.17%) reported the incorrect measurement of length cut or documentation
needed to be clarified. Importantly, no question of drain retention or concerns (0%) regarding complete drain removal was reported. For patient safety, consistently employing the risk mitigation recommendations described, the incidence of this avoidable complication, retaining fragments of drains upon removal, will be diminished significantly.