

Quality of medical care and surgical outcomes

after implementation of 19 points WHO surgical safety checklist in Hatwan Hospital Kurdistan-Iraq

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SIGN IN	TIME OUT	SIGN OUT
<input type="checkbox"/> PATIENT HAS CONFIRMED • IDENTITY • SITE • PROCEDURE • CONSENT <input type="checkbox"/> SITE MARKED/NOT APPLICABLE <input type="checkbox"/> ANAESTHESIA SAFETY CHECK COMPLETED <input type="checkbox"/> PULSE OXIMETER ON PATIENT AND FUNCTIONING DOES PATIENT HAVE A: KNOWN ALLERGY? <input type="checkbox"/> NO <input type="checkbox"/> YES DIFFICULT AIRWAY/ASPIRATION RISK? <input type="checkbox"/> NO <input type="checkbox"/> YES, AND EQUIPMENT/ASSISTANCE AVAILABLE RISK OF >500ML BLOOD LOSS (M/L/KG IN CHILDREN)? <input type="checkbox"/> NO <input type="checkbox"/> YES, AND ADEQUATE INTRAVENOUS ACCESS AND FLUIDS PLANNED	<input type="checkbox"/> CONFIRM ALL TEAM MEMBERS HAVE INTRODUCED THEMSELVES BY NAME AND ROLE <input type="checkbox"/> SURGEON, ANAESTHESIA PROFESSIONAL AND NURSE VERBALLY CONFIRM • PATIENT • SITE • PROCEDURE ANTICIPATED CRITICAL EVENTS <input type="checkbox"/> SURGEON REVIEWS: WHAT ARE THE CRITICAL OR UNEXPECTED STEPS, OPERATIVE DURATION, ANTICIPATED BLOOD LOSS? <input type="checkbox"/> ANAESTHESIA TEAM REVIEWS: ARE THERE ANY PATIENT-SPECIFIC CONCERNS? <input type="checkbox"/> NURSING TEAM REVIEWS: HAS STERILITY (INCLUDING INDICATOR RESULTS) BEEN CONFIRMED? ARE THERE EQUIPMENT ISSUES OR ANY CONCERNS? HAS ANTIBIOTIC PROPHYLAXIS BEEN GIVEN WITHIN THE LAST 60 MINUTES? <input type="checkbox"/> YES <input type="checkbox"/> NOT APPLICABLE IS ESSENTIAL IMAGING DISPLAYED? <input type="checkbox"/> YES <input type="checkbox"/> NOT APPLICABLE	<input type="checkbox"/> NURSE VERBALLY CONFIRMS WITH THE TEAM: <input type="checkbox"/> THE NAME OF THE PROCEDURE RECORDED <input type="checkbox"/> THAT INSTRUMENT, SPONGE AND NEEDLE COUNTS ARE CORRECT (OR NOT APPLICABLE) <input type="checkbox"/> HOW THE SPECIMEN IS LABELLED (INCLUDING PATIENT NAME) <input type="checkbox"/> WHETHER THERE ARE ANY EQUIPMENT PROBLEMS TO BE ADDRESSED <input type="checkbox"/> SURGEON, ANAESTHESIA PROFESSIONAL AND NURSE REVIEW THE KEY CONCERNS FOR RECOVERY AND MANAGEMENT OF THIS PATIENT

Background

Every surgical operation may have its sequel, but also may have potential complication, failure of treatment or morbidity because of different factors. Some factors are avoidable as shortage of equipments, instruments and improper preparation of patients resulting in wrong site or even wrong patient operation, not unexpectedness or preparedness for potential events, unorganized operative rooms, not working in team, low suspicion of drug allergy unwanted reactions and improper use of antibiotics

Objective

To improve quality of medical care and decrease morbidity and mortality through implementing 19 points WHO surgical safety checklist

Method

The checklist was implemented in Private Hatwan Hospital for Endoscopic Surgery, located in As Sulaimani city Kurdistan-Iraq with 9 inpatient beds.

Four hours teaching course was started to implement the checklist for all working personnel on 28th March 2009, which was chaired by the authors.

On the next day posters of the checklist were put in both English and Kurdish languages in the nurse's, doctor's rooms with both operating rooms.

Two persons were dedicated as direct observer to supervise and collect data, in and outside the operative rooms for the working hours.

The data collection lasted from 1st April-1st September 2009 and compared with the data of five previous five months

Results

An Improvement was noticed in the quality of medical care and surgical outcome after the implementation of the checklist.

There is improvement in marking the site or side of the operation... 90.5 > 96.7%

Proper using of the prophylactic antibiotics 85.7 > 100%

Proper using of the preemptive analgesia 80.6 > 96.7%

decline in complications 1.92 > 0.5%

Aspects	Before implementation	After Implementation	P-value
Marking the site or side of the operation	90.5 %	96.7 %	Significant
Proper Usage of Antibiotics	85.7 %	100 %	Significant
Proper Usage of preemptive analgesia	80.6 %	96.7 %	Significant
Complications i.e.: SSI, Sepsis, prolonged hospitalization, redo operations, conversion to open surgery	1.92 %	0.5 %	Significant

Since the P-value in the is less than 0.001, which is significant at the 99% confidence and it is statistically significant

Conclusion

Implementation of surgical safety checklist will improve quality of medical care and can diminish morbidity

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