000012 - Implementation of Observation ward Atrial Fibrillation protocol in the Emergency Department

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Introduction

With an aging population, increasing number of patients present to the Emergency Department (ED) with rapid Atrial Fibrillation (AF). Current protocols usually involve admission. We present an AF emergency observation ward protocol(AF EOW) which aims to provide an alternative to inpatient admission of patients with primary AF. Suitable low risk patients can be managed as outpatients, thus saving inpatient admissions, reducing hospital overcrowding and unnecessary waiting for treatment.

Methods

Initial data collection and evaluation of feasibility of a new AF protocol involving Novel Oral anticoagulants and outpatient management. Discussion with relevant departments-cardiology and pharmacy. This is followed by Implementation of a new AF protocol in a pilot, including training of Emergency Department staff, enrollment of suitable patients, co-ordination with pharmacy.

Data collection for new protocol and comparison with 'pre' control phase data to evaluate efficacy and safety.

Results

We had 36 patients placed in the protocol from Dec 2016 to June 2017 with about 5-6 patients a month being placed in our AF Emergency Observation ward protocol. Controls were selected from eligible cases from the pre-phase. There were 89 patients who were eligible for this protocol in the pre-phase one year period before the intervention was introduced. We compare the pre phase control group (89 patients for a one year period) to the EOW patients over a period of 7 months. The reattendance rate was lower than that in the 'pre' phase before EOW was implemented (pre-phase: 14% and EOW protocol group was 5.6%) and there was no 30-day mortality. Compared to our 'pre' phase control data, this protocol has reduced admission rates from 77% to 9% and length of stay for patients from 3.9 to 0.6 days

Conclusion

Preliminary results show that the implementation of the EOW AF protocol has the potential to reduce admission rates with no additional complications

000015 - Application of SOFA based model in mixed tertiary care ICU

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Introduction

SOFA (Sepsis-related Organ Failure Assessment) was developed as an attempt to assess the incidence and severity of organ dysfunction in critically ill patients1. SOFA score has been found to be comparable in predicting ICU mortality with other methods like APACHE II/III, SAPS II 2. There is scarcity of literature describing the use of SOFA tool in mixed ICU in predicting outcomes.

Objectives

We designed and implemented SOFA -based protocol in our tertiary care mixed ICU with an aim to look into ICU mortality and ICU performance. We also aimed to achieve 100% compliance with data collection with simpler SOFA-based protocol.

Methods

We did prospective, single-center, observational study in a 16 bedded suburban tertiary care hospital in Mumbai. The nursing staff were trained to document the SOFA parameters. The trained nurses then assessed and documented SOFA scores on daily basis. Data was validated and screened for errors by the consultant intensivist. Maximum SOFA for the day was documented on daily basis till the patient met with one of the 3 outcomes i.e Shift out from ICU, Death or Discharge against medical advice (DAMA). All patients admitted to ICU were included.

Results

There were total 1442 admissions from January 2017 to December 2017. We acheived 100% compliance in data collection. We observed good correlation between SOFA predicted mortality and actual mortality in high mortality group (>40%). There were less than predicted mortality in lower mortality (<20%) possibly reflecting salvageability.

SOFA	<10%	15-20%	40-50%	50-60%	>80%	>90%	Tot
Total	1152	112	83	40	12	43	1442
Death	15	8	36	24	11	36	130
%	1.30%	7.10%	43.30%	60%	91%	83%	9%

Conclusion

SOFA based protocol to assess ICU mortality and performance was fairly easy to implement without any need for sophisticated systems. By training bedside nursing staff, it was possible to achieve 100% compliance in data collection. The one-year review of data showed good correlation between predicted and actual mortality in high mortality group (>40%). All 15 less than 10% predicted mortality group deaths were reviewed for anticipated or unanticipated nature of death. There was also review of Delta SOFA (difference between SOFA max and admission SOFA). Any patient with high Delta SOFA was reviewed for in-hospital deterioration and any preventable factors. Overall SOFA based protocol is good scoring system to implement in mixed ICU to assess ICU performance.

000031 - "I See You" in ICU – Family Meetings to improve the experience of family members during hospitalization

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Introduction

The goal of the project "I See You" is family-centered-care based on **family meetings** that improve the experience of the patient's family members during hospitalization in the ICU. The meetings focus on relaying information, raising knowledge and addressing the social and emotional needs of families.

Providing support along with information was found to be the strongest predictor of family satisfaction and could lead to improve cooperation between family and staff [1].

Methods

Meetings and questionnaire: Family meetings consist of a multidisciplinary team, a group facilitator and combined with a multimedia presentation about the unit and equipment.

In addition, they focus on social and emotional needs: managing daily routine, sharing problems, fears and anxieties and more. At the end of the session a questionnaire was given to assess the impact of the intervention.

Sharing Data: At the end of the first quarter, the data from meeting was summarized and sent to the staff alongside tools for effective communication.

Results

The project began in February 2018. To date, 162 family members of 74 patients have attended the sessions. The topics discussed by the participants include: contact with the patient, prevention of infections, Procedures, visits, conversations with doctors, medical confidentiality; Guardianship; tracheostomy and Social issues. A sample of questionnaires was transferred to 57 participants report satisfaction at a very high level.

Conclusion

The meeting received a very positive feedback from the participants.

The project has achieved its goals and therefore it has been decided to be continued.

000047 - Study of Antimicrobial Utilisation and cost for Treatment of Sepsis in Medicine Intensive Care Unit of a Tertiary Care Hospital in Eastern India

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Introduction

High utilization and inappropriate usage of antimicrobial agents (AMAs) in an Intensive Care Unit (ICU) increases resistant organisms, morbidity, mortality, and treatment cost. Prescription audit and active feedback are a proven method to check the irrational prescription. Measuring drug utilization in DDD/100 bed-days is proposed by the WHO to analyze and compare the utilization of drugs. Data of AMAs utilization are required for planning an antibiotic policy and for follow-up of intervention strategies.

Objectives

- We proposed to evaluate the utilization pattern and cost analysis of AMA used in the Medicine ICU of a tertiary care Hospital in Eastern India

Methods

Inclusion Criteria were adult patients (≥ 18 years) and admitted in MICU >24hrs (expected to stay more than 48 hours) and receiving Anti-microbial therapy. The exclusions were patient admitted for <24hrs in the MICU and aatients not on Antimicrobial therapy. The sheet of each patient was checked every day after enrolment. Following points from sheet will be noted: type of Antimicrobials prescribed, duration of therapy, Dose and Dosage form, cost of antibiotics, comorbidities, APACHE II, SOFA and mortality. The antibiotics were divided in to restricted segments which included Carbapenems, Glycopeptides, Polymixins and Tigecycline. The risk factors were dicotomised for univariate analysis. Drug usage and cost were calculated as per World Health Organisation (WHO) guidelines. Costs were calculate per patient and per patient per day. The cost were calculated in United States Dollars (USD).

Results

103 patients were included in the study. The mean APACHE II score was 16.4 ± 5.6. The mean SOFA score was 4.5 ± 3.1. The mean charlsons index was 2.5 ± 2.2. Diabetes was the most common comorbidity at 29.1% followed by hypetention at 18.4%. The most commonest infection was tropical at 32% followed by pneumonia at 27.2%. The moratlity rate in the group was 20.8%. The mean length of stay in ICU was 4.6 ± 4.1. No comorbidities were found to be risk factor for either mortality or use of restricted antibiotics. APACHE II more than 20 increased the risk of moratality 4 times and risk of use of restricted antibiotics by 5 times. The use of restricted antibiotics was in 20% of the patients. The defined daily dose (DDD) was 48.2 ± 87.2 for all antibiotics. DDD/1000 Patient days was 99.9 ± 110.7. The per patient cost was 227.6 USD and the per patient per day cost was 48.5 USD

Conclusion

3rd generation cephalosporins were the highest used antibiotics. The risk of receiving restricted antibiotics increased with worsening APACHE II score The utilization of

restricted antibiotic in the ICU is around 20%.The cost of per patient per day therapy is less than $50 which is less than other studies. DDD/1000 PT DAYS is around 100 which similar to other studies world wide.

000075 - Effect of institutional case volume on in-hospital and long-term mortality in critically ill patients requiring mechanical ventilation

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Introduction

The purpose of this study was to evaluate whether institutional case volume affects clinical outcomes in patients receiving mechanical ventilation for 48 hours or more.

Methods

We conducted a nationwide retrospective cohort study using the database of Korean National Healthcare Insurance Service. Between January 2007 and December 2016, 158 712 adult patients were included at 55 centers in Korea. Centers were categorized according to the average annual number of patients.

Results

In-hospital mortality rates in the high-, medium-, and low-volume centers were 32.6%, 35.1%, and 39.2%, respectively. After adjustment, in-hospital mortality was significantly higher in low-volume centers (adjusted odds ratio, 1.332; 95% CI, 1.296-1.368; $P<0.001$) and medium-volume centers (adjusted odds ratio, 1.125; 95% CI, 1.098-1.153; $P<0.001$) compared to high-volume centers. Long-term survival for up to 8 years was better in high-volume centers.

Conclusion

Centers with higher case volume (>500 patients/year) of patients who required mechanical ventilation for 48 hours or more showed lower in-hospital mortality rate

and long-term mortality rate, compared to centers with lower case volume (< 300 patients/year)

000080 - Teaching Critical care in the developing countries - a challenge can be achieved!(ABC-pediatric critical care course as a module)

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Introduction

PICU is the one of the advance well growing speciality.It is the corner stone for all other pediatrics specialties, need high well trained personnel who could run the load of the services.Pediatric Critical Care Medicine is a well-established discipline in developed and many developing countries, but in very early stages in Sudan.Beside training personnel, PICUneed high technical and financial support that leads service to be sustainable.

Methods

looking for deficent of trained personeel in PICU in developing countries ,we designed a "ABC- Pediatric Intensive Care Course" (ABC-PICC) for pediatricians and para medics staff, The goal of this course was to standardize the care of acutely ill children and bring intensive care reflexes outside the pediatric intensive care unit (PICU). ABC-PICC is a three-full-day course with pre-test, post-test, and feedback form.

- The Course has been also designed to update the delegates about the recent advances in Pediatrics Intensive Care and how they can apply this knowledge into their day-to-day practice. This course comprises of didactic lectures and skill stations (along with a video on intensive care unit (ICU) procedures like central venous cannulation or endotracheal intubation each day followed by case simulation in small groups). Some of the salient contents of this course are: how to recognize a sick child in emergency room using the PAT traingle, how to manage a child with neurologic Injury use brain protective strategy, principles of analgesia and sedation in PICU, antibiotics and antifungal management in PICU, PICU procedures, airway management and adjuncts, how to setup a ventilator, ABG interpretations, shock & its management, fluid therapy and electrolyte abnormalities, nutrition issues in PICU,

blood component therapy in PICU. This ABC- PICU course is recommended for pediatricians interested in the field of pediatric emergencies and basic intensive care.

Results

120 candidates (pediatrician,anathesist,charge nurses)were trained in Sudan between 2012-2018 in different sudanese states -7 courses were held five at khartoum state and two at Geizeira state.In these two states there are total of 4 govermental critical care units 3 at khartoum with total of 18 PICU beds and one at Geizera state which has 8 beds shared with adult critical care unit.Continous feedback of the trainee progression done by establishing Multi medias groups (Whatsapps,drop box)where most of the course candidates are registered . sustainable teaching run through discussion of difficult cases,review articles,protcols ,images.Most of units started as HDU with continous sustainable annual training 2 out of those units are currently used Proper mechanical ventilation and follows proper sedation and analgesia polices and infection contols polices all this come out with acceptable reduction in mortality and morbiditiy.

Conclusion

Looking forwards for more collaborative and well prepared future plan to establish universal or regional structural critical care training need many keys to focus on starting by human resources training with the present of affordable and sustainable equipment and support services.Ethics, and research are cardinal points to built up sustain and developed critical care services in low set resources regions.

000088 - Anxiety Symptoms in Survivors of a General Intensive Care Unit

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Introduction

Post-Intensive Care Syndrome has been studied and is defined as new or worsening impairment in physical, psychological or neurocognitive status arising after critical illness and persisting beyond the acute care hospitalization. Critical illness survivors can suffer from non-specific anxiety symptoms, even without previous psychiatric disorder.

Objectives

To study the prevalence and risk factors of anxiety symptoms in medical, surgical and trauma patients during the six months post intensive care unit (ICU) discharge.

Methods

Retrospective study of ICU survivors, aged 18 years or more, admitted in the ICU for at least 48 hours, from january 2017 to march 2018, in a general ICU.

The assessment instrument was the Hospital Anxiety and Depression Scale - Anxiety subscale (HADS - A), cut off threshold ≥ 8; at the post ICU follow up clinic (carry out by an ICU doctor and a nurse), six months after ICU admission. The patients usually are invited to the follow-up clinic by phone call and letter. The exclusion criteria were previous severe psiquiatric disorders, not able to respond the questionnaire and ICU stay less than 48 hours.

Results

211 survivors were invited to the follow up clinic. A total of 148 (70%) patients went to the consultation, 42 meet the exclusion criteria. We included in the study 106 patients, the median age was 66 years, 58 (55%) were men and the median ICU length of stay was 9,7 days. Diagnosis of admission: medical 67%, surgical 24% and trauma 9%. The median SAPS II was 39. Sixty patients (57%) were on IMV and the median ventilation days was 7.

The anxiety symptoms prevalence was 14% (21 patients); the median age of this subgroup was 66 years, 52% were females, the median ICU length of stay was 8,9 days. Delusional memories in the ICU stay were present in 29% of the anxiety group and 16% in the other group. Among the diagnosis of admission we found: medical 71,4%, surgical 14,3% and trauma 14,3%. The median SAPS II was 36. Twelve patients (57%) were on IMV and the median ventilation days was 4,6.

Conclusion

The anxiety symptoms were present in 14% of this critical care survivors of a general ICU, at six months of follow up. Memories of delusional experiences while critically ill, were higher among the anxiety group. No relation was found with gender, IMV, severity of the disease or superior ICU length of stay.

000099 - Novel Interactive Patient Centered Care-The Introduce of Shared

Decision Making Impact on Early Tracheostomy in Prolonged Intubated Critical Patient

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Introduction

Shared decision making(SDM) became major care model enbodying patient centered care and physician-patient equality interaction. Tracheostomy has been poorly accepted, though with superiorly odds to pros, owing to cultural mis-understanding, in Taiwan.

Objectives

The aim of study is to investigate the impact of introducing SDM on early Tracheostomy(within 14 days) in prolonged intubated critical patients.

Methods

Medical record of tertiary medical center adult ICU admitted respiratory failure patient from Jan. 1st, 2016 to Dec. 31th, 2017 was retrospectively reviewed, and further subdivided into pre-SDM and post-SDM(after Jan. 1st, 2017) period for analysis. Prolonged intubation was defined as using ventilator support more than 14 days and sub-acute respiratory care center transferral needed. Early Tracheostomy and late Tracheostomy were defined as Tracheostomy created within 14 days and beyond the 14th day since being intubated and ventilated. Patient who was successful weaning, chronic ventilator dependent before admission, post Tracheostomy surgery, or expired was excluded. Data including total Tracheostomy rate, early and late Tracheostomy rate, ventilator weaning rate and ventilator days, in-hospital mortality, and length of hospital stay were collected. SPSS was applied for statistically analysis, with a p value less than 0.05 considered significant difference.

Results

Medical records from total 1253 patient from Jan. 1st, 2016 to Dec. 31th, 2017 were reviewed, and total 7137 patient ventilator days were recorded. Among them, the pre-SDM(2016) total Tracheostomy rate 8.8%, in compared to post-SDM(2017) total

Tracheostomy rate 9.6%, and 9.1% improvement was impressed. By inclusion and exclusion, 128 patients from year 2016 and 112 patients from year 2017 were considered prolonged intubated left for further analysis. Pre-SDM early Tracheostomy and late Tracehostomy rate were 42% and 58% individually, with ventilator weaning rate(43(79.6%) v.s 46(62.2%), p: 0.034), ventilator days(35.3+/-18.1 v.s 47.2+/-16.1, p< 0.001), in-hospital mortality(1(1.9%) v.s 6(8.1%), p: 0.237), and length of hospital stay(59.7+/-35.1 v.s 69.2+/-24.6, p: 0.091) of prolonged intubated patient. Post-SDM early Tracheostomy and late Tracehostomy rate were 39% and 73% individually, with ventilator weaning rate(27(69.2%) v.s 56(76.7%), p: 0.389), ventilator days(34.6+/-17.6 v.s 47.5+/-28.4, p: 0.004), in-hospital mortality(4(10.3%) v.s 6(8.2%), p: 0.737), and length of hospital stay(57.2+/-21.8 v.s 68.4+/-26.8, p: 0.028) of prolonged intubated patient. After SDM was introduced, ventilator days and length of hospital stay of prolonged intubated patient was found reduced 13 days and 11 days individually in compared in between early and late groups. The tracheostomy decision making time delay was found 5 days less after SDM introduced.

Conclusion

Our retrospective cohort study from a single tertiary medical center adult ICU revealed introducing shared decision making on early Tracehostomy in prolonged intubated critical patient might improve total Tracheostomy rate, reduce ventilator days and length of hospital stay, and shorten the tracheostomy decision time delay.

000131 - Intrahospital transport of adults on extracorporeal membrane oxygenation: A Chinese regional referral center experience

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Introduction

Utilization of extracorporeal membrane oxygenation (ECMO) has increased worldwide. ECMO may be a life-saving procedure for patients with severe reversible pulmonary or cardiac failure. As conventional transport may be hazardous, cannulating the patient at the referring hospital and transporting the patient on ECMO have a great role in those patients.

Objectives

In this study, we report a regional referral center experience on Intrahospital transport of adults on extracorporeal membrane oxygenation.

Methods

All patients transport to our hospital on ECMO between August 2013 and November 2018 were enrolled in this retrospective study. The data regarding the transportation of patients on ECMO support were collected. Complications and outcomes were also documented.

Results

A total of 66 transportations of patients with pulmonary or cardiac failure on ECMO support were performed. 41(62.1%) underwent VV ECMO and 25(37.9%) underwent VA ECMO of 66 patients, 55(83.3%) survived to decannulation and 33 (50.0%) survived to hospital discharge. 21(84.0%) survived to decannulation and 15(60.0%) survived to hospital discharge in 25 VA ECMO patients. 34 (82.9%) survived to decannulation and 16 (39.0%) survived to hospital discharge in 41 VV ECMO patients. All transportation performed by ground ambulance. The distances covered ranged from 6 to 396 km (mean, 202.9±104.9 km) and the average transport time was 192.2±86.0 minutes (range, 18 to 290 minutes). No deaths occurred during transport. two complications(bleeding) resulting in adverse outcome was reported.

Conclusion

Patient transfer to a referral institution while on ECMO support would be performed safely and reliably without risk.

000003 - The outcome of patients experienced unplanned extubation in a medical center

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Introduction

The outcome of patients experienced unplanned extubation in a medical center

Objectives

To compare the prognostic factors and outcomes of unplanned extubation (UE) among surgical and medical patients in 6 adult intensive care units (ICUs) in Chi Mei Medical Center

Methods

We prospectively registered the UE patients and retrospectively reviewed the electrical medical records (EMR) in 96-beds ICUs between Jan 1, 2009 and July 31, 2017.Total 341 patients experienced UE, and 161 patients were in surgical group (47.2%).

Results

There were 112 female patients (32.8%), and the mean age was 65.1 years (range: 18–101 years). The mean Acute Physiology and Chronic Health Evaluation (APACHE) II score was 16.8 and mean Glasgow coma scale score was 10.1. One hundred thirty-seven patients (49.0%) were re-intubated within 48 h (failed UE), and sixty patients died (17.6%). Compared with medical group, the surgical patients had a similar mean value of ICU (14.3 vs. 15.7 days), hospital stays (37.8 vs. 37.5 days) and hospital costs (51.7 vs. 46.3 X 10000 New Taiwan Dollars), but lower failed UE (40.4% vs. 56.7%, p=0.002) and hospital mortality (13.0% vs. 21.7%, p=0.025). Multivariate analyses were performed to evaluate those factors predicting failed UE and mortality, and it showed that higher APACHE II and positive end-expiratory pressure (PEEP) and not in weaning status before UE predicted failed UE, and uremia, liver cirrhosis and cancer patients were independently associated with hospital mortality.

Conclusion

Among UE patients, surgical group had similar hospital stays and expenditures. After adjusting for confounding factors, surgical patents were not associated with hospital mortality nor failed UE. Those who had higher APACHE II and PEEP and not in weaning status were associated with failed UE. Uremia, liver cirrhosis and cancer patients—were associated with higher mortality in patients who underwent UE.

000016 - Height Measurement in ICU patients: Can Ulnar length be used to predict height in Singapore Population?

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Introduction

Low tidal volume ventilation improves outcomes in acute respiratory distress syndrome. Calculation of this volume requires knowledge of a patient's gender, and height, which may not be available in emergency admissions. A recent study in Caucasian population demonstrated that ulnar length can be accurately used to set tidal volume for lung protective ventilation. We proposed to study the accuracy and applicability of ulnar length measurement in multi-ethnic Asian population in Singapore.

Methods

After written informed consent, 401 (258 male and 143 female) adult surgical patients had their ulnar length measured along with the other demographics including actual standing height. The measured height and predicted height (from ulna length measurement using MUST equation) was used to calculate the tidal volume based on ARDSnet nomogram. Bland and Altman analysis was used to compare the results obtained by two methods.

Results

Using the MUST equation ulnar length measurement predicted the height more accurately in men >65 years of age (mean difference -2.61cm, SD 4.21). Mean tidal volume was 390 mL for males and 291 mL for females when calculated from the actual height based on ARDSnet nomogram. Bland Altman analysis showed a bias of 20 ml (SD 26 ml) for male and a bias of 29 ml (SD 29 ml) for female patients. Predictive equations were developed using bivariate regression analysis to improve the accuracy.

Conclusion

Using MUST equation to predict height and calculate tidal volume can result clinically unacceptable errors in our cohort of population. Predictive equations needs further prospective validation.

000117 - Evaluation on the effectiveness of smoking cessation by psychological methods in patients with

myocardial infarction in intensive care unit

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Introduction

In Taiwan, about 18,000 people died of smoking related diseases annually. Smoking is the risk factor of coronary heart disease. The data from Health Promotion Administration of department of health in Taiwan showed that 35.6% males with myocardial infarction still kept smoning due to not understand the risk of smoking. However, there were limited studies about smoking cessation program in intensive care units.

Objectives

To evaluate the effectiveness of smoking cessation by psychological methiod in patients after myocardial infarciton

Methods

This study conducted in a medical center from January 2017 to June 2018. We recruited the smoking subject with acute myocardial infarction and used psychological smoking cessation method. We collected the general data and follow up by telephone tracking at one month, three months, and six months after discharge to evaluate the success rate of smoking cessation.

Results

Among 65 participants, 40 (61.5%) had willing to quit smoking while 25 out 65 had no intension. Fourty-five (69.2%) patients accepted encourage from medical staff, and 53 (81.5%) had family supports. According to the telephone follow up showed that the smoking quitting rate 1 month after discharge was 70.80%, 3 months after discharge was 66.7%, 6 months after discharge was 65.9%. In total, 29 subjects did not smoke within 6 months. The results showed that there was a significant difference ($p < 0.05$) in the predictor factors, the willing of quitting smoking, encourage of medical staff, and family support. The main reason for quitting smoking were for good health sake and the frighten of myocardial infarction recurrence.

Conclusion

The study showed that smoking cessation education in intensive care unit for patients with acute myocardial infarction is important for patient to quit smoking. The medical staff should take the chance to convince the patient to quit smoking, and continually by telephone follow up to tracking the effectiveness of quitting smoking. Therefore, the successful rate of quit smoking would be raised. Therefore, we also set this result as a nursing care monitor indicator for patient with acute myocardial infarction in intensive care unit. We focus on promoting the quitting smoking activity to improve the nursing care quality of patient with acute myocardial infarction.

000050 - Nursing staff capacity plays a crucial role in compliance to empiric antibiotic treatment within the first hour in patients with septic shock

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Introduction

The compliance to current sepsis guidelines about empiric antibiotic management in septic patients is low in China.

Objectives

We performed this study to confirm the effect of nursing staff capacity on timely antibiotic treatment in septic shock patients.

Methods

We recorded the timings of empiric antibiotic treatment after septic shock diagnosis. Detailed information about the capacity of nursing staff and nursing shift was also recorded. Nursing capacity included 4 levels (N0, N1, N2 and N3) based on training and working years. We calculated the compliance to empiric antibiotic treatment within the first hour and evaluated the effect of nursing staff on the compliance.

Results

A total of 214 patients with septic shock were included in the analyses, 110 of whom received empiricantibiotic treatment within the first hour (51.4%) after septic shock diagnosis.The compliance to empiric antibiotic treatment of N0, N1, and N2 and senior nursing staff was 44.83%, 48.70% and 78.26%, respectively. The higher

capacity nursing staff exhibited a significantly higher compliance (p<0.05). In addition, nursing shiftwas an important factor of compliance to antibiotic management, which was 53.7%, 49.23%, 63.89% and 42.37% during the day shift, afternoon shift, night shift, and shifting of duty, respectively. Compared with the night shift, the compliance to empiric antibiotic treatmentduring duty
shifting decreased significantly (42.37% vs. 63.89%, p=0.042).

Conclusion

The compliance to empiric antibiotic treatment within one hour for septic shock was low. Nursing staff capacity and nursing shift were related factors in the low compliance.

000084 - A study on the current jointing status of Critical Care Nurse Training and Master of Nursing Specialist education

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Introduction

Chinese National Nursing Development Plan (2016-2020) has pointed out that an advanced nursing training system should be set up, in which college education, post-graduation education and continuing education should be linked together, so as to promote the closely relationship between nursing advanced training and clinical needs.

At the present stage, the cultivation of specialized nurses and the nursing postgraduate education have common and relevant points, such as the training goal, the construction of core competence system, the professional direction etc., which effectively intergrated specialist nurse's train with mastery nursing education. It is an effective way to train the clinical senior nurses which is guided by the specialty, and to promote the organic combination of nursing master's level education and nursing competence evaluation system as well as nursing professional management. It is also helpful to clarify the professional position of nursing postgraduate and embody the professional advantages of mastery nursing education.

Objectives

To explore the current jointing status of Critical Care Speciality Nurse Training and Master of Nursing Specialist education and to provide references for establishing jointing system in China

Methods

We delivered our research by literature review and compared the current situation of Critical Care Specialist Nurses training and Master of Nursing Specialist education at home and abroad horizontally from the professional role,curriculum,clinical practise mode.

Results

A jointing professional education system has been formed between Critical Care Specialist Nurses training and Master of Nursing Specialist education in foreign countries, China is still in the exploratory stage.

Conclusion

We should clarify the professional roles and training objective of Critical Care Specialist Nurse and Master of Nursing Specialist postgraduate, to structure the feasible jointing education system between the Critical Care Specialist Nurses and the Master of Nursing Specialist education .

000118 - The efficiency of PAD Training course on the ICU nursing staff in the evaluation of CPOT, RASS and CAM-ICU

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Introduction

Pain, agitation and delirium are important prognosis factors of the critical patients. In the intensive care unit(ICU), 63~75% of the patients had pain experience during

hospitalization, 71% had agitation, and the incidence of delirium was 16-85%. Correct evaluation of patients with pain, agitation, delirium (PAD) is important in patient's clinical prognosis and quality of nursing. In our hospital, the Critical-Care Pain Observation Tool (CPOT) was used to assess patient pain, while the agitation and delirium did not be assessed. Therefore, we planned to use the Richmond Agitation-Sedation scale (RASS) to assess of patient convulsions and the Confusion Assessment Method for Intensive Care Units (CAM-ICU) to assess delirium.

Objectives

To investigate the impact of PAD education training course on improvement of rate of evaluation of CPOT, RASS and CAM-ICU assessed by the nursing staffs in intensive care unit.

Methods

From August 31st, 2017 to September 4th, 2017, the intensive care physicians conducted three PAD education trainings for the nurses of intensive care unit and explained the steps of CPOT, RASS and CAM-ICU evaluation via continuous quality improvement method. A table was designed for CPOT, RASS and CAM-ICU inspection. In September, 12 PAD tutors were trained. In October, the tutors checked 120 person-times of nursing staff to assess the correctness of PAD. Then, we compared the correction and inter-rater reliability of the staffs and tutors.

Results

A total of 1810 times of evaluation of CPOT and RASS of nursing staff were collected from October 2017 to December 2018 to evaluate PAD results. The correct rate of pain assessment by CPOT increased from 79.8% to 99.8%, the correct rate of RASS assessment increased from 77.8% to 99.7%, and the rate of delirium assessment by CAM-ICU was increased from 0% to 95%. The   inter-rater reliability of PAD assessment between the tutors and nursing staffs were CPOT 0.9(Kappa, P<0.001) and RASS 0.9(Kappa,P<0.001) .

Conclusion

This study demonstrated the adequate PAD training courses via continuous quality improvement method could improve corrective rate and rate of assessment of PAD in the nursing staffs of ICU.

000128 - A retrospective study of symptoms and signs of acute deteriorations in general wards

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Introduction

A previous study reported that 70% of patients who experienced an unexpected cardiac arrest in general wards exhibited an exacerbation of respiratory symptoms within 8 h before the arrest 1). Another study reported that although 66% of the patients presented with abnormal symptoms or signs within 6 hours before the cardiac arrest, doctors are aware of only 25% of them 2). However, this concern has not been examined thoroughly enough in Japan.Because the rapid response system (RRS) has become prevalent worldwide in recent years, the number of hospitals employing RRS has also increased in Japan. In situations where our facility is requested to establish some measures and assessments to provide adequate treatments before acute deteriorations, it is believed to be quite important to consider possible innovations to the system so that the phenomena occurring in patients who suffer from sudden changes are clarified to provide basic data.

Objectives

The objective of this study was to identify the early signs that appeared before acute deteriorations of patients in the wards. We also aimed to verify the details of nurses' awareness of the signs and their actual actions to rectify them.

Methods

This study is a single-center retrospective cohort study. We enrolled patients who were urgently admitted to critical care centers owing to acute deteriorations. Data were collected from the hospital database (July 2017–October 2018) based on the UK National Early Warning Score (NEWS). We considered the moderate risks of NEWS as meaningful deteriorations. Further, details regarding nurses' recognition and response were recorded.

Results

A total of 91 patients were admitted to critical care centers because of the change in their condition during the survey period. Their average age was 63.1 years; 58 were males (64%) and 33 were females (36%).A total of 121 symptoms appeared in

patients who required urgent admission to critical care centers. Among the early symptoms, 40 (33.0%) were respiration-related, 28 (16.5%) were circulation-related and 14 (11.5%) were neurological. Regarding the number of patients with different timings of the onset of initial symptoms that most frequently appeared, 31 patients (34%), reported symptoms within a 7–8 h period before sudden changes. Nurses were aware of initial signs 84.2% of the time. In 76.2% of the cases, nurses reported the patients' conditions to doctors, provided treatments such as oxygen administration, and performed electrocardiogram examinations.
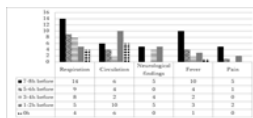

Figure 1: The timing of the onset of different symptoms

Conclusion

1) We found that early signs and symptoms, mostly in terms of changes in respiratory or circulatory conditions, appear within 8 hours before acute deteriorations. In particular, respiratory signs were frequently observed.

2) Nurses were aware of early signs in a relatively high rate of cases. In most of cases, nurses reported the conditions to doctors and provided considerable treatments in advance.

000094 - Analysis the risk factors of complications after free flap reconstruction of head and neck cancer in the ICU : A retrospective study

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Introduction

Most complications after free flap reconstruction occur in the first 7 days, and the most critical period is in the first 72 hours after the operation. Few studies had examined the risk factors of flap complications and need to recheck in the operation room (OR) on the patients with head and neck cancer in the ICU.

Methods

During 2016-2017, a total of 203 patients admitted to our ICU were consecutively enrolled and underwent free flap reconstruction due to head and neck cancer. The survival of free flap was assessed by nursing staff and an on-call doctor. Patients were divided into two groups according to the need to recheck in the OR due to complications occurred (n=45) or not (n=158). Multivariable regression analysis was used to determine the potential risk factors of the need to recheck of the free flap of these patients.

Results

The basic characteristics of the two groups had no significant differences in the age, sex, and co-morbidity. Binary logistic regression analyses of the need were rechecked in the OR revealed significantly higher odds ratios (95% confidence intervals) for the first operation time and heart disease(HR,1.185, p= 0.020; HR 0.242, p=0.017, respectively).

Conclusion

The first operation time and previous heart disease were independent risk factors for the need of recheck of the free flap in patients with head and neck tumor after reconstruction.