CARDIOTHORACIC INTENSIVE CARE UNIT
PROCEDURES FOR NURSING CARE

心肺监护室
护理手册

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INTRODUCTION

This manual has been designed to establish nursing care standards and correct operating procedures for patient care in the Intensive Care Unit setting. The purpose is to ensure that uniform, quality nursing care is delivered to all patients requiring intensive care.

This manual is also intended to be a learning tool for the nurses. It is to be used as part of the nursing orientation process. Each ICU nurse should review the material in tbis manual and be able to perform all of the skills satisfactorily on the Performance Checklist in the presence of an experienced ICU nurse. Each nurse should then take the written examination and pass with a score of 90% or better. This process should be repeated each year in order to ensure that all nurses maintain a high level of competency in intensive care nursing.

引　言

编制本手册的目的，是建立监护室(ICU)的护理标准和确立正确的操作程序，使护士能对所有术后病人提供质量一致的护理。

本手册可作为护士的学习工具，也可作为护理入门课程的一部分。监护室护士应复习本手册的内容，要能够在有足够资历的监护室护士督导下正确完成工作清单所列的项目技术；各护士在课程完毕后均需考笔试，成绩要达90%或以上。上述复习要每年进行一次，使各护士能经常保持高水平的监护室护理。

Section I PATIENT ASSESSMENT

ASSESSMENT GUIDELINES FOR THE ICU PATIENT

These guidelines are to be used both in patient assessment and documentation in the patient record.

NEUROLOGICAL:

Level of Consciousness: Oriented, Confused, Inappropriate, Incomprehensible, Unresponsive
Movement of Extremities, Muscle Tone
Reflexes: Cough, Gag
Pupillary Reaction to Light and Equality

CARDIOVASCULAR:

EKG Rhythm: Normal sinus rhythm or abnormal Rate, Regularity
Perfusion: Skin temperature, Capillary refill
Pulses: Normal, Thready, Bounding
Edema: Presence or Absence
IV Fluids: Type, Additives, Rate, Site, Condition of Site
Heart Sounds: Murmurs, Extra sounds
Presence of Arterial Line: Location
Presence of Pulmonary Artery Catheter: Location, Waveforms, Pulmonary Artery Pressures
Presence of Pacemaker or Wires

RESPIRATORY:

Character of Respirations: Regular, Signs of Distress, Apnea, Retractions
Breath Sounds: Equal or Unequal, Rales, Rhonchi, Wheezes
Artificial Airway: Presence and Size, Trach, Endotracheal Tube
Ventilatory Support: Type(ventilator, mask, nasal cannula), Ventilator Settings, Amount of Oxygen
Chest Tubes: Volume of Drainage, Type, Color, Location of Tubes, Suction
Cough: Productive, Nonproductive

第一章　病人评估

监护室（ICU）病人评估规则

下列规则适用于评估病人和病历记录

神经系统：

知觉水平：定向、错乱、反应不当、无理解力、无反应
四肢运动，肌肉张力
反射：咳嗽反射、呕吐反射
瞳孔对光反应和是否对称

心血管系统：

心电图节律：正常窦性心律或异常心律、心率、规律性
灌注：皮肤温度、微细血管充盈
脉搏：正常、丝脉、洪脉
水肿：有或无
静注液：种类、内加药物、速度、静注部位、静注部位状况
心音：杂音、额外音
有动脉测压管时：位置
有肺动脉导管时：位置、波形、肺动脉压力
有起搏器或导线

呼吸系统：

呼吸特点：规则、呼吸困难体征、呼吸停顿、三凹症
呼吸音：相等或不相等、湿罗音、干罗音、喘鸣
人工气道：有无、尺码大小、气管造口、气管插管
通气支持：种类（呼吸机、面罩、鼻导管）、呼吸机的调校、供氧量
胸腔引流管：引流量、种类、颜色、引流管位置、吸引
咳嗽：有痰、无痰

GASTROINTESTINAL:

Any G.I. Tubes: Suction, Gravity, Feedings

Bowel Sounds: Presence or Absence

Status of Abdomen: Soft, Distended, Hard

Feeding: Type and Tolerance to Feeding

Stools: Frequency, Description

GENTTOURINARY:

Urine: Color, Character

Presence of Catheter

Any Problems Voiding Spontaneously

SKIN:

Skin Color

Skin Abnormalities: Open Areas, Rash, Petechiae, Bruises, Burns

OTHER:

Dressings: Location, Type, Drainage

Drainage Tubes: Volume of drainage, Type, Color, Location of tubes, Suction

胃肠系统：

有无胃肠插管：抽吸、重力引流、喂食

肠鸣音：有或无

腹部状态：软、膨胀、硬

喂食：食物种类、病人对喂食的忍受程度

大便：次数、特点描述

泌尿生殖系统：

尿：颜色、特性

有无导尿管

自尿时伴随的问题

皮肤：

皮肤颜色

皮肤异常：破损区、疹子、瘀斑、挫伤、烧伤

其他：

敷料：位置、种类、引流物

引流管：引流量、种类、颜色、引流管的位置、吸引

PROCEDURE: PATIENT ADMISSION TO THE ICU

Each patient admitted to the ICU will receive the necessary nursing assessment and care. The following equipment should be available at the bedside so that the nurse can remain with the patient on his/her admission to the unit.

Equipment

Clean, prepared patient bed
EKG monitor with 3 electrodes
Oxygen setup: ventilator or humidifier with flow meter, mask or cannula
Blood pressure cuff
Suction source with clean suction tubing and bottle
Sterile bowl for normal saline
Sterile suction catheter and glove
Sterile IV bottle with tubing
Thermometer
Self-inflating bag (Ambu)
ICU nursing flow sheet

For cardiac patients, add:

Prepared transducers 1 or 2
Transducer holder
Temperature probe
IV infusion pumps

Nursing Action

1. Check to see that the patient has a patent airway and is breathing.
2. Put oxygen on the patient according to the doctor's orders. Place on the ventilator if needed and adjust settings according to the doctor's orders.
3. Attach EKG electrodes to the patient and the EKG monitor, select lead, and check for a clear waveform. Set alarm limits and turn the alarm on.
4. If patient has arterial and hemodynamic lines, connect these to the transducer and monitor, then calibrate.
5. Check patient's blood pressure with cuff. If the patient has arterial line, this should still be done to check for accuracy of the arterial line.
6. Count apical pulse with stethoscope for one minute to check the accuracy of the monitor.
7. Check IVs for function and accurate flow rate

病人进入监护室(ICU)的操作程序

每名新进入ICU的病人都要接受必要的护理评估和护理：病人进入ICU时，护士须与病人在一起，所以病床边应备有下列各项器材。

器材

整理好的清洁病床
心电图监测器与三枚电极
吸氧装置：呼吸机或带流量表的湿化器、面罩或鼻导管
血压袖
吸引器，配备清洁的吸引管和瓶子
清毒碗，用于盛生理盐水
消毒吸引管和手套
消毒静注瓶和导管
体温计
自动充气囊(Ambu)
监护室专用护理记录单

心脏病病人要另加：

准备好换能器1或2个
换能器托盆
体温探头
输液泵

护理操作

1. 检查病人气道是否畅通，有无呼吸。
2. 按医嘱给病人供氧。按需要接呼吸机。按医嘱调校呼吸机。
3. 把心电图电极贴在病人身上，按心电图监测器，选择导联，检查波形是否清晰，调好警报值，让警报开着。
4. 如病人有动脉测压管和血液动力学测压导管，把导管与换能器和监测器相接，然后校准。
5. 用压力袖测量病人血压。即使病人有动脉测压管，亦应进行上述测量，以证实动脉测压管结果准确。
6. 用听诊器听心律一分钟，以检查监测器是否准确。
7. 检查静注系统，滴注正常、流率准确。

8. Check patient's temperature.
9. Perform nursing physical assessment including:
   a. Neurological: Level of consciousness, orientation, ability to follow commands, limb movement.
   b. Respiratory: Listen to breath sounds with stethoscope, count respiratory rate, assess quality of respirations.
   c. Cardiovascular: Listen to heart sounds, note EKG rhythm, check peripheral pulses.
   d. Gastrointestinal: Palpate abdomen, listen for bowel sounds.
   e. Renal: Assess urine color and amount.
10. Mark the chest bottles when patient arrives in unit.
11. Check all drainage tubes to see that they are draining properly and note amount and kind of drainage.
12. Check all dressings for drainage and intactness.
13. Record all vital signs and observations on the nursing flow sheet.

8．测量病人体温。

9．进行下列各项护理体检评估：

a．神经系统：知觉程度、定向、能否遵从命令、四肢运动。

b．呼吸系统：用听诊器听呼吸音、数呼吸率、评估呼吸性质。

c．心血管系统：听心音、注意心电图节律、检查周围脉搏振动。

d．胃肠系统：触诊腹部、听诊肠音

e．肾：评估尿的颜色和量。

10．病人进入监护室后，立即在胸腔引流瓶上作记号。

11．检查所有引流管，注意引流是否通畅，记录引流物的量与类别。

12．检查所有敷料，注意有无引流物和是否完整。

13．在护理记录单上记录所有生命体征和一切观察结果。

VITAL SIGNS

Vital signs are the most convenient and reliable indicators of a patient's condition.

Definition

Vital signs in the RR-ICU include apical pulse, respiratory rate, blood pressure and temperature.

Necessity

Vital signs allow the doctor and nurse to recognize changes in a patient's condition and possibly prevent a life threatening situation.

The nurse needs to be aware of a patient's pre-operative vital signs to serve as a basis for interpreting vital signs during the post-operative period.

It is also important to record the vital signs on the RR special record. We do this in order that both the doctors and nurses can follow the patient's progress post operatively.

Pulse

An apical pulse is taken because it is the most accurate. Every heart beat may not be going through the circulatory system. In this case, it would not be felt in the peripheral pulses.

The normal pulse rate is 60-100 beats per minute. The pulse sbould be measured for one full minute because there may be irregular beats.

When the patient's pulse increases, there is an increased stress placed on the heart.

Respirations

It is important to measure the respiratory rate for one full minute. The nurse should note the quality of respirations also, i.e., shallow, irregular.

The normal respiratory rate is 16-22 times per minute.

Blood Pressure

The systolic blood pressure is an indication of the highest pressure exerted on the arterial walls during the cardiac cycle.

The diastolic blood pressure is the lowest level of pressure in the arteries during the cardiac cycle, which is right after the heart contracts.

Normal blood pressure is: systolic 100-140
diastolic 70-90