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6719 例住院患者医院感染的监测结果分析

杨长琼 刘凤群 徐海 叶东 程乃俊

(武警四川省总队医院医务处 四川 乐山 614000)

摘要 目的:分析我院住院患者医院感染的发病特点和危险因素。**方法:**利用前瞻性监测和回顾性分析方法对 2012 年 1~3 月我院收治的 6719 例住院患者中发生医院感染的病例进行调查分析。**结果:**6719 例住院患者发生医院感染 145 例,感染率 2.16%;感染部位以呼吸系统为首(59.3%),其余依次为为胃肠道(17.2%)和泌尿道(11.7%);ICU 的感染率最高,为 22.0%,其次为外科系统(4.03%)和内科系统(1.71%)。病原学检测送检率为 51.0%,阳性率为 78.3%,共检出 118 株病原菌,其中革兰氏阴性菌占 57.6%,真菌占 22.9%,革兰氏阳性菌占 17.8%。导致院内感染的危险因素中最常见的为放疗化疗(31.0%)、气管切开(15.9%)、导尿插管(17.9%)。**结论:**加强医务人员的感控意识,强化卫生制度,严格执行无菌操作规程,合理应用抗菌药物是控制医院感染发生的重要措施。

关键词: 医院感染;监测;分析;危险因素

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Analysis of the Nosocomial Infection Surveillance Data of 6719 Inpatients

YANG Chang-qiong, LIU Feng-qun, XU Hai, YE Dong, CHENG Nai-jun

(Sichuan Armed Police Hospital, Leshan Sichuan, 614000, China)

ABSTRACT Objective: To analyze the characteristics and risk factors of nosocomial infection in our hospital. **Methods:** Prospective surveillance and retrospective investigation and analysis were used to investigate the situation of nosocomial infection in 6719 cases of hospitalized patients from January to March 2012 in our hospital. **Results:** Among all the inpatients, 145 cases of nosocomial infection were found, the infection rate was 2.16%; respiratory system was the first infection site, which accounted for 59.3%, then 17.2% of gastrointestinal tract and 11.7% of urinary system. The infection rate of intensive care unit was 22.0%, which was the highest, then 4.03% of surgery systems and 1.71% of internal medicine systems. The sample detection rate was 51.0%, 78.3% of which were positive, detecting a total of 118 pathogens, including Gram-negative bacteria that accounted for 57.6% and the positive bacteria accounted for 17.8%, fungi accounted for 22.9%. The risk factors of nosocomial infection were described as follows in order: radiotherapy and chemotherapy(31.0%), tracheotomy(15.9%), retention catheterization(17.9%). **Conclusion:** Infection control awareness of the medical staff should be increased, and the hand hygiene system, strictly enforcing the sterile operating procedures, the rational use of antimicrobial drugs are important measurements for control of hospital infection.

Key words: Hospital infection; Monitor; Analysis; Risk factors

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前言

医院感染(nosocomial infection)又称医院获得性感染(hospital acquired infection),是指住院患者在入院时不存在,也不处于潜伏期,而在住院期间引起的感染^[1]。发生医院感染不仅给患者带来痛苦甚至危及生命,还会造成严重的经济损失^[2,3]。因此,如何预防和控制医院感染具有重要的临床意义,也受到研究者们高度关注与重视。为了解我院医院感染的发生特点及危险因素,现对我院 2012 年 1~3 月收治的 6719 例住院患者的医院感染情况进行统计分析,报告如下。

1 资料与方法

1.1 一般资料

作者简介:杨长琼(1968-),女,主管技师,主要研究方向:医院感染控制及预防, E-mail:wj372xiong@163.com

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统计 2012 年 1~3 月本院收治的 6719 例住院患者的出院病历资料,其中男 3529 例,女 3190 例。

1.2 方法

采用前瞻性和回顾性调查方法,医院感染病例按卫生部医院感染网要求,统一表格填写、统计、汇总。

1.3 诊断方法

以卫生部 2001 年颁布的《医院感染诊断标准》为依据。

2 结果

2.1 医院感染的发生率

共调查 6719 例住院患者,其中 145 例发生医院感染,医院感染的发生率为 2.16%,其中 ICU 的感染率最高,为 22.0%,其次为外科系统 4.03%,以神经外科最高,为 7.94%以及内科系统 1.71%,以神经内科最高,为 7.55%。

2.2 医院感染的发生部位

排在前五位的医院感染发生部位依次为呼吸道、胃肠道、

泌尿道、手术切口、血液感染,见表1。

2.3 医院感染的危险因素

对145例医院感染的危险因素进行统计分析,其中最常见的是放疗化疗、气管切开、导尿插管,见表2。

2.4 医院感染的病原菌监测

在145例医院感染患者中,有74例次进行了病原学检测,送检率为51.0%;其中58份标本病原体检测阳性,阳性率为78.3%;共检出病原体118株,以革兰阴性杆菌为主,占57.6%,其次为真菌占22.9%(以白色念珠菌为主),革兰阳性球菌占17.8%,厌氧菌占1.7%。

表1 医院感染部位的构成比

Table 1 Constituent ratio of nosocomial infection site

Infection site	Number of cases	Constituent ratio(%)
Respiratory tract	86	59.3
Gastrointestinal tract	25	17.2
Urinary system	17	11.7
Operative incision	11	7.6
Blood	3	2.1
Others	3	2.1
Total	145	100.0

表2 医院感染的危险因素构成比

Table2 Constituent ratio of nosocomial infection risk factors

Risk factor	Number of cases	Constituent ratio(%)
Radiotherapy & chemotherapy	45	31.0
Tracheotomy	23	15.9
Retention catheterization	26	17.9
Immunodeficiency	14	9.7
Diabetes mellitus	12	8.3
Others	25	17.2
Total	145	100.0

3 讨论

我院2012年1~3月医院感染的发生率为2.16%,符合卫生部对三级甲类医院感染率 $\leq 10\%$ 的要求。科室医院感染率以ICU、神经外科、神经内科等为高,主要原因在于上述科室收治的多为病情危重、免疫功能低下的患者^[4],大部份需行机械通气、留置尿管和深静脉置管,加上广谱抗生素的使用,使患者极易感染,并且经常导致重症感染和二重感染^[5,6]。这提示在进行医院感染监控和预防中要抓住重点科室,根据科室及患者特点有针对性的采取防范措施以减少医院感染机会^[7]。

我院医院感染的部位以呼吸道感染占首位,多与基础疾病有关,如神经外科和神经内科脑血管意外及颅脑外伤昏迷患者居多,这类患者机体防御能力降低,且由于气管切开插管、呼吸机的使用沟通了支气管树与外环境的直接联系,造成呼吸道粘膜损伤,使呼吸道屏障功能降低,自身携带的病原菌作为条致病菌^[8],发病后长期卧床,咳嗽反射受抑制,呼吸道分泌物难以排出可导致吸入性肺炎,是引起呼吸道感染的主要因素。这类患者应尽量缩短插管和上机时间,呼吸机管路每周更换1-2次,如污染严重时应随时更换,严格按规范进行消毒灭菌^[9]。

我院感染危险因素以放疗化疗、气管切开、导尿插管为主

要危险因素。长期放疗化疗患者免疫力降低,导尿有损伤尿道的可能性,导尿管引流不畅导致感染,尿路感染与留置尿管持续时间成正比^[11-13]。这类患者病室应加强空气消毒,减少人员流动,进行操作时严格无菌,重视手部卫生,认真落实手卫生制度,以减少感染机会^[14,15]。

我院感染致病菌以G⁻菌为主,真菌感染有增加的趋势,已经超过G⁺菌,这应引起重视^[16]。这是由于长期预防性使用抗菌药物或多次、多联,频繁更换抗菌药物,易产生菌群失调导致异位定植,一些条件致病菌成为医院感染致病菌,导致二重感染,甚至多重耐药,使耐药性增高^[17]。医院内抗菌药物的合理使用,已成为控制医院感染的主要措施之一,同时也是提高疗效必不可少的步骤^[18]。

通过本次对住院患者医院感染监测结果进行分析,我们认为医院感染受多因素影响,其发生、发展、预防、控制均贯穿于诊治的全过程。降低医院感染率必须采取综合措施,加强对医务人员感控知识的培训,提高感控意识的;加强医用器材的消毒;严格执行无菌操作规程和消毒隔离制度,各项侵入性操作动作应轻柔;加强对各临床科室抗菌药物使用的监管,减少预防性使用抗生素,避免长期使用广谱抗生素^[19,20],以有效地控制医院感染。

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