

85 - CATHETERIZATION DELAY BLADDER AS RISK FACTOR FOR HOSPITAL INFECTION OF URINARY TRACT: IMPORTANCE OF NURSES IN PREVENTION

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INTRODUCTION

Is called the Hospital Infection (HI) those acquired in the hospital, not raised or outside the incubation period upon admission, unless it can be related to the previously hospitalized in the same hospital (MARTINS, 2001).

This matter has to be appreciated and studied by health professionals, from the first half of the nineteenth century, with the work of Florence Nightingale, nurse who served in British military hospitals in the mid-nineteenth century. The nurse was in charge of re-directing the hospitals, as regards the procedures for disease control (isolation, for example) and brought to light a new conception of disease, thus giving rise to modern nursing. It was also important in the development of a formal and systematic preparation for a search of knowledge and a way of working so different from the doctor. The role of Florence Nightingale led to the perception of the disease, in an effort to restore health, has proved a fruitful idea, giving a nursing original size - to encourage this process of repair using the "clean air, of light, the heat, cleaning, rest and diet, "thus showing, an epidemiology of infectious diseases (MARTINS, 2001; NIGHTINGALE, 1989).

Urinary tract infections (UTI) include the invasion of microorganisms urethral meatus of the renal cortex and the structures adjacent to the urine system (prostate gland and urethral) (ALMEIDA, 2007).

The urinary tract infection is considered as the most incident in the hospital, followed by the surgical site infection, pneumonia, bloodstream among others. They are usually associated with the use of urinary catheter-delay (UCD), and its use has been the subject of many studies by the medical community, for being invasive and a device that, depending on the criteria for inclusion in its use and maintenance, almost always lead to UTI.

The main risk factors, extrinsic to the patient (external to him) for the development of the UTI are numerous, among them, the colonization of the urethral meatus, the duration of catheterization, non-use of closed system of urine collector, in breach of the art insertion and maintenance of the catheter (STAMM; COUTINHO, 1999).

The risks of infection related to invasive devices can be minimized if the procedures are performed by professionals trained and prepared, and are directly proportional to the time of bladder catheter. However, there is good adherence to the recommendations of Committee for Hospital Infection Control of the institutions (ALMEIDA 2007; STAMM; COUTINHO, 1999; SOUZA et al, 2007).

The professional nursing has a responsibility imperative to break the cycle infectious agent-host-transmission, which results in the occurrence of hospital infection with the practice of preventive and control measures recommended in the management and instrumentation of the UCD (SOUZA et al, 2007).

In the last three (03) decades, were creating new articles hospital, with the focus on prevention. Meanwhile, the manuals do not attack for the care of these catheters has high evidence, and that a closed system collector is a great innovation for the decrease in rates. This must be pre-signed before the insertion of the catheter, decreasing the contamination intra-luminal (inside the catheter) (TSUCHIDA et al, 2008).

In view of the problem is that the UTI to patients in hospitals, it is necessary to the continued execution of searches in the area, mainly because the nurse the primary responsibility for implementation of bladder catheterization procedure, as well as its maintenance use.

METHODOLOGY

As the infection of the urinary tract is a problem that can be prevented and minimized with the actions of nursing in accordance with the recommendations of CCIH, was performed an extensive literature review, concluding an integration between the authors on the subject, in databases HighWire online (found 144 works and selected 04), ISI Web of Knowledge (01 found work that was not chosen), Pubmed (279 found work and selected 05) and VHL (43 found jobs and chose 01). We included work from the year 2000, available in full text, which clearly focusing on the object being studied.

Here is a summary table of the bases-researched, with their quantitative found, the included and the excluded.

ONLINE BASES	AVAILABLE	INCLUDED	EXCLUDED
Pubmed	279	05	274
Highwire	144	04	140
BVS	43	01	42
ISI Web of Knowledge	01	00	00

DISCUSSION

For Stamm, 1999, the urinary tract infections (UTI) as the most frequent environments of hospitals in general, is 35-45% of the total, with 70 to 80% of them related to the procedure of poll bladder. Among the hospitalized patients, about 10% are exposed to this procedure, which has increased significantly, the rates of mortality in hospitalized patients who acquire UTI (STAMM, COUTINHO, 1999).

There are several risk factors that lead to UTI, and divided into intrinsic (cause of the patient) and extrinsic (originate procedures). We can say that the intrinsic are: female, the size of the urinary tract, advanced age, severity of illness-based, people with diabetes, the constant presence of glucose in urine, favoring the proliferation microbial; post-renal transplant, polytraumatized, burned and immunocompromised. But the extrinsic are an indication of the catheterization, because the insertion of the distal catheter can carry microorganisms into the bladder; continuous use of the catheter, as the cuff for fixing the probe is not conducive to the total emptying of the bladder, urinary and these permits to proliferation of microorganisms, duration of catheterization, because the risk of presence of bacteria increases by 5% for each day of catheterization, type of catheter and

the closed system of drainage (open drainage is contraindicated, since it is in breach of sterility system of UCD), or not use of antibiotics and concomitant errors in the procedure for handling and insertion of catheters (ALVES; LUPPI; PAKER, 2006).

Study of nurses in Pennsylvania, in Paoli Hospital (May 2006 to May 2007), developed a program for prevention of UTI related to UCD. That way, managed to reduce significantly the rate of UTI after establishment of a correct practice in the insertion and maintenance of catheters, for nurses. The study showed in detail the experience, with the formation of a group of catheters, and completion of a program of prevention for UTI, with the focus on education for professionals responsible; reduction in the use of UCD; collection of cultures of urine, after 24 hours procedure, and finally, to improve the performance of nursing, scoring and rewarding the best nurses who had performed their procedures, based on the number of UTI related to UCD inserted per person (MURPHY et al, 2006).

Already a prospective study conducted in five general hospitals in Japan (from January to December 2004), outlined the relationship between UTI and catheter care associated with catheters. They conclude that the decline in UTI can happen from the decline in the patient's exposure to risk factors. That was the big difference in that search, because the nurse was responsible in managing the information, correct technique, perineal hygiene and continuing education (ALVES; Luppi; PAKER, 2006).

If the planning and implementation of nursing care are observed the conditions of known risk, the service features and treatment, prevention measures and control established in protocols of proven reliability, added to the permanent adoption of continuing education to make the necessary upgrade of knowledge, no doubt, the quality of care is guaranteed (MURPHY et al, 2006).

Pereira et al, 2000 puts the washing of hands as a safeguard of fundamental importance, which is done efficiently, can reduce by up to 80% of hospital infections. This procedure removes, almost completely, the transient flora existing in the hands of health professionals, as they are withdrawn, with the simple use of neutral detergent and water, the microorganisms that are temporarily in the more superficial layers of the skin of the hands (KAMPF, 2004).

The washing of hands still deserve a thorough study with a view to the establishment of strategies to convince the team of health on its importance and its subsequent adoption in practice (PEREIRA et al, 2000).

Techniques that involve the staff in decision-making process, as the protocols for the prevention and control, have had positive effects. The higher the involvement of co-responsibility, greater adherence to established protocols (STAMM; COUTINHO, 1999).

We can only contemplate the education of professionals in a permanent manner, favoring the existence of periodic clinical sessions, which have proven of great benefit to occur changes in behavior. Moreover, studies have demonstrated the need for investment in education in order to establish a new practice in the prevention and control of IH (STAMM; COUTINHO, 1999; ALVES; LUPPI; PAKER, 2006; PEREIRA et al, 2000).

CONCLUSIONS

The urinary tract infections are major causes of morbidity and mortality at the hospital, and may be associated with the use of catheters bladder. The nursing professionals must be continuously learning, to collaborate directly to minimize the risks related to insertion and maintenance of this device. The ideal is to remove most of the major risk factor for UTI, avoiding the use of bladder catheter to delay or withdraw it in a way as possible.

As a professional nurse remains twenty-four (24) hours in the hospital, next to the patient, he is assigned responsibility for the insertion and care while using the UCD. However, in actuality, we find that professionals do not think it important to uniformity of practice, regarding the prevention and control of hospital infections of the urinary tract, causing increases the risk of patients in need of UCD.

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CATHETERIZATION DELAY BLADDER AS RISK FACTOR FOR HOSPITAL INFECTION OF URINARY TRACT: IMPORTANCE OF NURSES IN PREVENTION

ABSTRACT

The urinary tract infection (UTI) is considered as the most incident in the hospital and are usually associated with the use of urinary catheter-delay (UCD). Its use has been the subject of many studies by the medical community, for being an invasive device, which is the main risk factor for the increased incidence of urinary tract infection. The professional nursing has direct responsibility related to the increase in the number of such infections, regarding the implementation of the procedure itself, as well as in maintaining the catheter / system during use. We see how most common risk factors for the presence of bladder catheter to delay the type of system for collecting urine, length of stay and fall of the art in the insertion and / or maintenance of the

catheter / collector system. The best way to prevent urinary tract infection is still prevent their use, or at least remove the bladder catheter as early as possible.

Keywords: cross infection, urinary catheterization, risk factors, nursing care.

CATHÉTÉRISATION DE LA VESSIE RETARD COMME UN FACTEUR DE RISQUE POUR L'APPAREIL URINAIRE DES INFECTIONS NOSOCOMIALES: L'IMPORTANCE DE L'INFIRMIER DE PRÉVENTION

RESUMÉ

L'infection urinaire (UTI) est considéré comme le plus incident à l'hôpital et sont généralement associées à l'usage de cathéter urinaire retard (CUR). Son usage a été l'objet de nombreuses études menées par la communauté médicale, d'être un dispositif invasif, qui est le principal facteur de risque pour l'augmentation de l'incidence de l'infection des voies urinaires. Le professionnel des soins infirmiers a la responsabilité directe liée à l'augmentation du nombre de ces infections, en ce qui concerne la mise en œuvre de la procédure elle-même, ainsi que dans le maintien de la sonde / système pendant l'emploi. On voit comment la plupart des facteurs de risque communs pour la présence de la vessie cathéter de retarder le type de système de collecte de l'urine, la durée du séjour et à l'automne de l'art dans l'insertion et / ou l'entretien de la sonde / système collecteur. La meilleure façon de prévenir l'infection des voies urinaires est encore empêcher leur usage, ou au moins enlever la vessie cathéter le plus tôt possible.

Mots-clés: infection urinaire, de la vessie cathéter, les facteurs de risque, les soins infirmiers.

CATETERISMO VESICAL DE DEMORA COMO UN FACTOR DE RIESGO PARA EL TRACTO URINARIO INFECCIÓN HOSPITALARIA: IMPORTANCIA DE ENFERMEROS EN PREVENCIÓN

RESUMEN

La infección del tracto urinario (ITU) es considerada como la más incidente en el hospital y son generalmente asociados con el uso de catéter urinario retardo (CUR). Su uso ha sido objeto de muchos estudios realizados por la comunidad médica, por ser un dispositivo invasoras, que es el principal factor de riesgo para el aumento de la incidencia de infección del tracto urinario. El profesional de enfermería tiene la responsabilidad directa en relación con el aumento en el número de esas infecciones, en relación con la aplicación del procedimiento en sí, así como en el mantenimiento del catéter / sistema durante el uso. Vemos cómo la mayoría de los factores de riesgo comunes para la presencia de sonda vesical de demora el tipo de sistema de recogida de orina, la duración de la estancia y la caída de la técnica en la inserción y / o el mantenimiento del catéter / sistema colector. La mejor manera de prevenir la infección del tracto urinario es aún de impedir su uso, o al menos quitar la sonda vesical, tan pronto como sea posible.

Palabras clave: infección urinaria, cateterismo urinario, factores de riesgo, atención de enfermería

CATETERISMO VESICAL DE DEMORA COMO FATOR DE RISCO PARA INFECÇÃO HOSPITALAR DO TRATO URINÁRIO: IMPORTÂNCIA DO ENFERMEIRO NA PREVENÇÃO

RESUMO

A infecção do trato urinário (ITU) é considerada como a mais incidente no ambiente hospitalar e são normalmente associadas ao uso de sonda vesical de demora (SVD). Seu uso tem sido motivo de muitos estudos por parte da comunidade médica, por ser um dispositivo invasivo e que é o principal fator de risco para o aumento da incidência de infecção do trato urinário. O profissional de enfermagem tem responsabilidade direta relacionada ao aumento do número dessas infecções, no tocante a execução do procedimento em si, bem como na manutenção do cateter/sistema durante o uso. Vemos como fatores de risco mais comuns a presença de cateter vesical de demora, o tipo de sistema coletor de urina, tempo de permanência e quebra da técnica na inserção e/ou manutenção do cateter/sistema coletor. A melhor forma de prevenir a infecção do trato urinário ainda é evitar seu uso ou, ao menos retirar o cateter vesical o mais precoce possível.

Palavras-chave: infecção hospitalar, cateterismo urinário, fatores de risco, cuidados de enfermagem.