

INCONTINENCE ASSOCIATED DERMATITIS IN HOSPITALIZED PATIENTS: PREVALENCE AND ASSOCIATED FACTORS.

Hypothesis / aims of study

To identify and analyze the prevalence and demographic and clinical factors associated with the occurrence of Incontinence Associated Dermatitis (IAD).

Study design, materials and methods

This is an observational, cross-sectional, analytical and descriptive epidemiological study conducted in seven hospitals. The data were collected through medical records, interviews and physical examination of all hospitalized patients, during the period from March to June 2015. The final sample was 775 patients that were 18 years and older. The following instruments were used for data collection: Sociodemographic and clinical data and Incontinence Associated Dermatitis Intervention Tool (IAD-IT). The prevalence of IAD was obtained in a single day in each hospital (point-prevalence). Data descriptive analysis was performed using SPSS 22.0 Statistical Package. Data were analyzed by means of: Chi-square test or Fisher’s exact test for the categorical variables and T-test for the numerical variables. Decision tree model (Classification and Regression Tree - CART algorithm) was used to identify wound-associated factors in a simultaneous and isolated way. The adopted statistical significance level was 5%.

Results

Out of 775 patients, the average age was 60.4 years (SD=18.7), with male sex predominance (59%), and predominance of the following variables: marital status (53.3%) and high school education level (52%).

Regarding to the clinical data of the total sample, it can be pointed out: the presence of Systemic Arterial Hypertension (SAH - 337/43.5%) and Diabetes Mellitus (229/ 29.5%), with glycemic changes in 242 patients (31.2%); use of soap/beauty soap bar (422/ 54.5%) and diapers (337/43.5%); no use of skin moisturizer (469/60.5%); use of anti-hypertensive drugs (360/39.5), anti-inflammatory drugs (177/22.8%), antibiotics (344/ 44.4%) e anticoagulants (251/32.4%); elective surgery (184/23.7%). Two hundred and seventy-four (35.4%) patients were overweight, and 123 (15.9%) were obese. Regarding the presence of pain, only one patient with IAD reported it from mild to moderate levels (mean=6; SD=2.8).

The prevalence of IAD among the patients was 0.5%, only in four patients. The four IAD lesions were homogeneously distributed in different regions (outer lips, right gluteus region and perianal region). As for the classification, according to the Incontinence Associated Dermatitis Intervention Tool, early DAI was the most frequent (2/40%).

Statistically significant differences were evidenced between the groups with or without IAD regarding the following variables: use of diapers (p=0.035), stiffness (p=0.042), use of soap/beauty bar soap (p=0.043) and moisturizer (p=0.024). However, in the Classification and Regression Tree (CART) algorithm has not confirmed associated factors with IAD occurrence in the studied sample. (Figure 1).

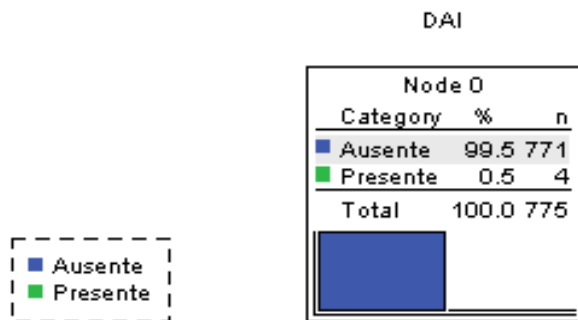


Figure 1 - Associated factors with the presence of IAD, according to the CART analysis.

Interpretation of results

The prevalence of IAD among inpatients has been considerably lower compared to other studies performed with hospitalized patients^[1,2]. Although there were no associated factors with the IDA occurrence (according to CART), factors such as diaper use (p = 0.035) and the presence of stiffness (p = 0.042) should to be commented. The use of diapers in incontinent patients is an important factor associated with IDA. The presence of liquid feces and urine in the diaper in prolonged contact with the skin has been known to cause irritation and maceration due to moisture and local heat. The digestive enzymes lipases and proteases are the major irritants and responsible for these changes in the skin. The most affected areas are usually the perineal region, abdomen, gluteus and outer lips^[2]. In a systematic literature review (n = 54), the stiffness was considered as one of the associated factors with the presence of IAD, in addition to Diabetes Mellitus, skin moisture, advanced age and impaired nutrition^[3].

Concluding message

The IAD prevalence obtained in the present study was low and there were not associated factors with IAD occurrence by the Classification and Regression Tree algorithm in the studied sample. Longitudinal studies are necessary to confirm the relationships found between the studied variables, contributing to a more accurate diagnosis of the causality of these conditions and, therefore, the establishment of more effective measures of IAD prevention and treatment in the hospital setting.

References

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Disclosures

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