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Short-lived efficacy of ertapenem for refractory hidradenitis suppurativa

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Although previous studies have reported clinical improvement of hidradenitis suppurativa (HS) using intravenous (IV) ertapenem, the sustained efficacy of this broad-spectrum antibiotic has yet to be elucidated. We conducted an IRB-approved retrospective chart review of patients at the Montefiore/Einstein HS Treatment Center who completed 6 weeks of IV ertapenem. Disease severity (HS-Physician Global Assessment [HS-PGA]; Numerical Rating Scale [NRS] pain scores) was documented at pre-, during-, and post-treatment visits. Wilcoxon tests were performed to determine the relationship between clinical markers. Among the patients meeting our inclusion criteria (n = 7), there were significant reductions of HS-PGA (pre 4.86 vs during 3.14, $P = .031$) and pain scores (pre 7.14 vs during 1.14, $P = .016$) during ertapenem treatment. However, this dramatic remediation of disease was rapidly lost within one month of ertapenem withdrawal (HS-PGA [pre 4.86 vs post 3.43, $P = .063$] and NRS pain scores [pre 7.14 vs post 5.43, $P = .250$]). Three patients underwent an additional six weeks of IV ertapenem, all of whom experienced identical disease remediation compared with their first course of treatment. Ertapenem appears to be one of the most powerful remedies for advanced HS. Further investigation may reveal how to best mitigate the loss of efficacy following the withdrawal of ertapenem.

Commercial disclosure: None identified.

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Atypical variants of leishmaniasis: A hurdle in combating disease epidemic

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Background and Objective: Pakistan has a population of 200 million with 30% below the poverty line. Cutaneous leishmaniasis (CL), caused by phlebotomine sandfly ranks 9th in overall disease burden. Estimated annual incidence is 21,700-35,700. It is endemic in Baluchistan, Khyber Pakhtunkhwah, Sindh, and South Punjab with recent outbreaks. Wet and dry lesions suggest *Leishmania tropica* and *Leishmania major*. Atypical morphology or site can result in failure to diagnose and subsequently contain disease outbreak. Documentation and presentation of these variants is therefore imperative.

Methods: It was a descriptive study carried out in Dermatology Outpatient, Benazir Bhutto Hospital, Rawalpindi, Pakistan from July 2018 to 2019. Patients were selected by convenient sampling. Inclusion criteria included presence of single/ multiple nodules or plaques, with / without ulceration, on exposed areas greater than a month, travel to known endemic area and confirmation after histopathology. After informed consent, a complete physical examination was performed. Site, number and morphological varieties of lesions were noted.

Results: A total of 228 patients were seen. Seventy percent patients were less than 30 years old with 2-18 months duration. Male to female ratio was 7:3. Atypical lesions were present in 21 patients. Lesions affecting the upper limb were 30%, lower limbs 27%, head and neck region 40% and trunk 3%. Atypical forms seen were lupoid, sporotrichoid, verrucous, fungal, eczematous, paronychial and satellite lesions confirmed after biopsy.

Implications: Knowledge and presentation of atypical varieties of assists in disease control and ultimate elimination.

Commercial disclosure: None identified.

14992

Chronic inflammatory skin diseases are associated with herpes zoster in United States inpatients

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Many high-risk individuals remain unvaccinated and at risk for significant morbidity from herpes zoster (HZ). Patients with chronic inflammatory skin diseases (CISDs) have potential risk factors for HZ, including systemic immunosuppressant use and immune dysregulation. We sought to determine whether CISDs are associated with HZ in US inpatients. Data were analyzed from the 2002-2012 Nationwide Inpatient Sample, a representative 20% cross-sectional cohort of US hospitalizations (n = 68,088,221 children and adults). In multivariable weighted logistic regression models including age, sex, race/ethnicity, insurance, mean household income, and long-term systemic corticosteroid use, hospitalization for HZ was associated with multiple CISDs: atopic dermatitis (OR [95% CI]: 1.38 [1.14-1.68]), psoriasis (4.78 [2.83-8.08]), pemphigus (1.77 [1.01-3.12]), mycosis fungoides (3.79 [2.55-5.65]), dermatomyositis (7.31 [5.27-10.12]), systemic sclerosis (1.92 [1.47-2.53]), cutaneous lupus erythematosus (1.94 [1.10-3.44]), vitiligo (2.00 [1.04-3.85]), and sarcoidosis (1.52 [1.22-1.90]). Bullous pemphigoid (2.76 [1.69-4.51]), lichen planus (2.97 [1.34-6.59]), morphea (2.76 [1.39-5.49]), and pyoderma gangrenosum (2.45 [1.16-5.15]) showed higher odds only in bivariable models, whereas, hidradenitis suppurativa and alopecia areata were not associated with HZ. Sensitivity analyses among ages < 60 and < 50 years showed similar results. Predictors of HZ in CISDs included older age, female sex, non-white race/ethnicity, and long-term systemic corticosteroid use. Inpatient length of stay and cost of care were significantly higher in HZ patients with vs without CISDs. CISDs are associated with increased hospitalization for HZ, even below recommended ages for vaccination with live and recombinant HZ vaccines. Additional studies are needed to confirm these findings, determine mechanisms of VZV reactivation, and establish CISD-specific vaccination guidelines.

Commercial disclosure: None identified.

14993

A randomized controlled trial comparing 2.5% and 5% benzoyl peroxide gel for treatment of pitted keratolysis

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Background: Pitted keratolysis (PK) is a common skin disease and frequently accompanied by foot pitted lesions and malodor. It is commonly found in young male adults, especially soldiers. Topical benzoyl peroxide gel (BP) is an over-the-counter drug, also known as medication for PK. However, dosage and duration of BP for PK treatment is controversial.

Objective: To study the effectiveness and safety of topical 2.5% BP compared with 5% BP in treatment of PK.

Methods This randomized control trial study conducted at Chumpol Naval Rating School, Chonburi, Thailand, in 2019. Naval rating cadets with PK were invited to enroll in this study. Subjects were randomly assigned either 2.5% or 5% BP to apply the drug on their both soles once daily before bedtime for 2 weeks.

Results: Forty-two and 47 participants who were treated with 2.5% and 5% BP, respectively, were included in analysis. Self-evaluation of the foot odor level using visual analog scale (VAS) showed a significant decrease in both 2.5% and 5% BP groups from 5.4 to 3.7 ($P < .05$).

Conclusions: This study demonstrated that either 2.5% or 5% BP could be used for treatment of PK and foot malodor. Due to similar efficacy and side effects, 2.5% BP may be more preferred.

Commercial disclosure: None identified.