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A PROSPECTIVE STUDY TO SCREEN THE PATTERN OF ANTIBIOTIC USE AND DEVELOPMENT OF RESISTANCE AMONG PATIENTS WITH RECURRENT CELLULITIS

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Background:

Cellulitis is one of the most common and serious bacterial infection involving deep layers of skin and tissues, thus fall into skin and soft tissue infections.Recurrent cellulitis is the cellulitis which is reappearing again after the 1st episode.For patients with two or more episodes, low dose long term antibiotic therapy can be given by choosing the antibiotic regimen based on patients culture reports to reduce (or) prevent the recurrence of cellulitis.Present dissertation had been conducted to study the prescribing of patterns antibiotic and development of resistance among patients with recurrent cellulitis.We aimed to determine the bacterial pathogens isolated in cultures and its sensitivity pattern for each episode of cellulitis. Methodology:

This is a prospective study carried out in the department of General Surgery over a period of 6 months.

Results:

A total of 99 recurrent cellulitis patients in the study,69(69.6%) were males and 30(30.3%) were females.

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VISION :

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MISSON :

•To deliver quality academic programs in Pharmacy and empower the students to meet industrial standards.

•To build student community with high ethical standards to undertake R&D in thrust areas of national and international standards.

•To extend viable outreach program for the health care need of the society.

•To develop industry institute interaction and foster entrepreneurial spirit among the graduates

Age groups between 51-60 were atmost percentage of 31.3%(31).38(38.4%)lower limb cellulitis was at great number in disease patterns among recurrent cellulitis patients.Preponderance of patients(53 patients)were prescribed with dual antibiotic therapy (Magnex and Metrogyl).Frequency of Staphylococcus aureus species stays first in AST reports antibiogram of E.coli showed decreased sensitivity in 2nd AST towards almost all antibiotics for which the test was performed.

Conclusion: This study concludes that rationale of antibiotic use and close monitoring is essential in the treatment of cellulitis with the help of standard treatment guidelines of SSTI's(Treatment based on AST reports) to prevent the further recurrent episode and associated complications of cellulitis.

TUBERCULOSIS AND ALCOHOL CONSUMPTION IN INDIA. Gayathri.S - Pharm D - IV th year

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ABSTRACT:

Background: Excess alcohol use among tuberculosis (TB) patients complicates treatment of TB and increase the morbidity and mortality.

Objectives: To characterize the role of excess alcohol use in TB control, we describe the epidemiology of excess alcohol use and TB in the India among those aged ≥ 15 years.

Design: Using data reported to the National Tuberculosis Surveillance System, 1997-2012, we examined associations between excess alcohol use and TB treatment outcomes and markers for increased transmission using multivariate logistic regression. We used Cox proportional hazards regression analysis to examine the relationship between excess alcohol use and the rate of conversion from positive to negative in sputum culture results.

Risk factors for alcohol use in TB patients:

It was discovered that consuming alcohol substantially increases the risk of relapse of TB patients as well as the risk of morbidity because of poor treatment outcomes due to decreased drug adherence and high rate of loss of follow up or other physiological mechanism(alcohol affects the innate and adaptive immune responses,lung function, hepatotoxicity,HIV etc.,

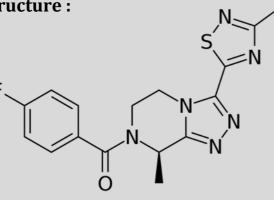
Results: Excess alcohol use was documented for 30% (95%cl: 24.00,35.00) of patients. Prevalence of excess alcohol use was greater among male patients (20.6%). Excess alcohol use was associated with a positive sputum smear result (aOR 1.23, 95%CI 1.18-1.28) and caused death during treatment. The rate of culture conversion was higher among patients without excess alcohol use (adjusted hazard ratio 1.20, 95%CI 1.18-1.23).

Conclusions: Excess alcohol consumption was common among patients with TB, and was associated with TB transmission, lower rates of sputum culture conversion, and lead to increased morbidity and mortality in India.

DRUG MONOGRAPH M.C. SAI HARSHITHA , J.PRAVALLIKA (IV PHARM D)

Brand name : VEOZAH Generic name : fezolinetant Approved by FDA Approved date : may 12 2023 Manufacturer company : ELI LILLY AND COMPANY Molecular structure :





Molecular formula : C16H15FN6OS

Molecular weight: 358.4 g/mol

Indications : Veozah[™] is indicated for the treatment of moderate to severe vasomotor symptoms due to menopause.

Dosage and administration: Take a single 45 mg Veozah tablet orally once daily with or without food. Take Veozah with liquids and swallow whole. Do not cut, crush, or chew tablets. Administer Veozah orally at about the same time each day. If a dose of Veozah is missed or not taken at the usual time, administer the missed dose as soon as possible, unless there is less than 12 hours before the next scheduled dose. Return to the regular schedule the following day.

Metabolism-Fezolinetant is Dosage form and strength: Tablets: 45 mg, round, light red, filmcoated tablets, debossed with the Astellas logo and '645' on the same side

Mechanism of action : Veozah is a neurokinin 3 (NK3) receptor antagonist that blocks neurokinin B (NKB) binding on the kisspeptin/neurokinin B/dynorphin (KNDy) neuron to modulate neuronal activity in the thermoregulatory center. Fezolinetant has high affinity for the NK3 receptor (Ki value of 19.9 to 22.1 nmol/L), which is more than 450-fold higher than binding affinity to NK1 or NK2 receptors.

Pharmacokinetics : In healthy women, fezolinetant Cmax and AUC increased proportionally over a dosage range from 20 to 60 mg once daily (0.44 to 1.33 times the approved recommended dosage). Steady-state plasma concentrations of fezolinetant were reached after two once daily doses, with minimal fezolinetant accumulation.

Absorption-The median (range) time to reach fezolinetant Cmax is 1.5 (1 to 4) hours in healthy women.

Distribution-

The mean apparent volume of distribution (Vz/F) of fezolinetant is 189 L. The plasma protein binding of fezolinetant is 51%. The blood-to-plasma ratio is 0.9.

Elimination-

The effective half-life (t1/2) of fezolinetant is 9.6 hours in women with vasomotor symptoms. The apparent clearance at steady-state of fezolinetant is 10.8 L/h.

primarily metabolized by CYP1A2 and to a lesser extent by CYP2C9 and CYP2C19. A major metabolite of fezolinetant, ES259564, was identified in plasma. ES259564 is approximately 20-fold less potent than the parent. The metabolite-to-parent ratio ranges from 0.7 to 1.8. **Excretion-**

Following oral administration of fezolinetant, 76.9% of the dose was excreted in urine (1.1% unchanged) and 14.7% in feces (0.1% unchanged)

Pharmacodynamics :

Treatment with fezolinetant did not show any clear trends in sex hormones measured (follicle-stimulating hormone, testosterone, estrogen, and dehydroepiandrosterone sulfate) in menopausal women. Transient decrease of luteinizing hormone (LH) levels was observed at peak concentrations of fezolinetant.

ADRS :

Abdominal pain, diarrhea, insomnia, back pain, hot flush, hepatic transaminase elevation. **Drug interactions :**

amiodarone will increase the level or effect of fezolinetant by affecting hepatic enzyme CYP1A2 metabolism. Contraindicated. Fezolinetant AUC and peak plasma concentration are increased if coadministered with drugs that are weak, moderate, or strong CYP1A2 inhibitors caffeine will increase the level or effect of fezolinetant by affecting hepatic enzyme CYP1A2 metabolism. Contraindicated. Fezolinetant AUC and peak plasma concentration are increased if coadministered with drugs that are weak, moderate, or strong CYP1A2 inhibitors.

Contraindications :

Veozah is contraindicated in women with any of the following conditions:

- •Known cirrhosis
- •Severe renal impairment or end-stage renal disease

•Concomitant use with CYP1A2 inhibitors

Storage conditions : Store at 20°C to 25°C (68°F to 77°F) with excursions permitted from 15°C to 30°C (59°F to 86°F) [see USP Controlled Room Temperature].

Reference :

https://reference.medscape.com/drug https://www.drugs.com/veozah.html https://go.drugbank.com/drugs

Departmental Activities in April- 2023 PERFECT CLICKS



Workshop On Emerging Aspects of Analatical science & Technology-(EAAST)



Challenges & Oppurtunities in Pharmacy Profession to make india pharma superpower in 2030



carrier opportunities in pharmacy profession





Campus Placement Drive



World Malaria Day