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Seven Hills College of Pharmacy, Tirupati,
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In association with Sri Padmavathi Medical College for Women, Alipiri Road, Tirupati, Chittoor (Dist.,), Andhra Pradesh, India.
www.shcptirupati.com;shcpdic333@gmail.com
Phone : 7730084513, 7702484513




## VISION

To emerge as one of the premier pharmacy colleges in the country and produce pharmacy professional of global standards.

## MISSION

- 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 programs for the health care need of the society.
- To develop industry institute interaction and foster entrepreneurial spirit among the graduates

## A RETROSPECTIVE STUDY ON OCCURRENCE OF URINARY TRACT INFECTION IN POST RENAL TRANSPLANT RECIPIENTS IN A TERTIARY CARE TEACHING HOSPITAL


**Sorabadi Divya**
**Pharm.D Intern**



**Background:** Renal transplant recipients should receive immunosuppressants to prevent graft rejection. By suppressing the immune response of the recipient, it increases the risk of opportunistic infections. Among all infections, urinary tract infections (UTI) are the most common. So, our study deals with the nature of post transplantation urinary tract infections, its causative pathogens.

**Methodology:** A retrospective observational study was carried out to retrieve data of renal transplantation patients to evaluate the incidence of Post renal transplant UTI. This study also focuses on Nature of UTI including relapse UTI, recurrent UTI. As post transplantation requires maintenance immunosuppression, there is a chance for ADRs associated with the therapeutic regimens. So, these reports were also analyzed for ADRs and its severity.

**Results:** The available data from the medical records of 87 renal transplantation patients suggests that 42.46% of 73 males and 50% of 14 females had developed UTI during their follow up. UTI is mostly observed in 21-40 age groups. Recurrent UTI is observed in 3 patients. Data of Urine culture sensitivity reveals E.coli is the major causative pathogen which accounts for 39.5% of UTI. Our study revealed 48 of 87 patients had experienced ADRs after transplantation, in which 37.66% are mild, 59.74% are moderate and 2.59% are severe.

**Figure.1 Occurrence of UTI episodes after renal transplantation**

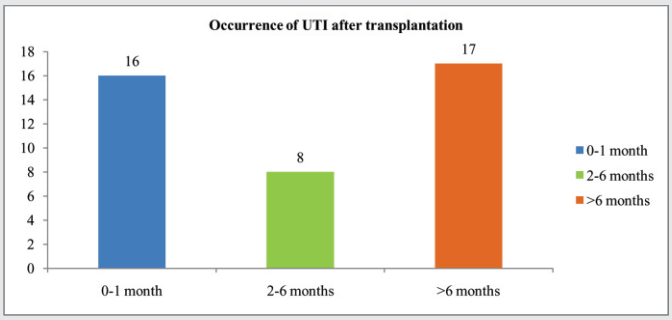



**Figure 2.Microbiological profile of UTI in renal transplant recipients**

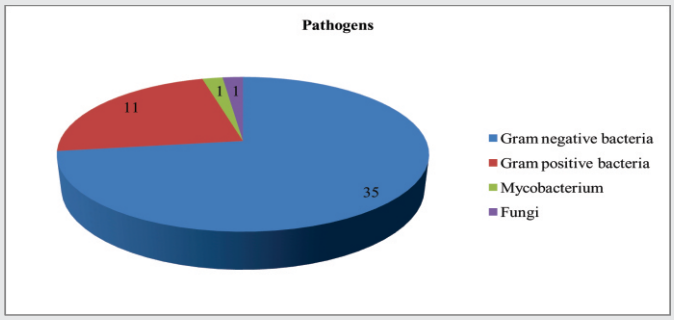
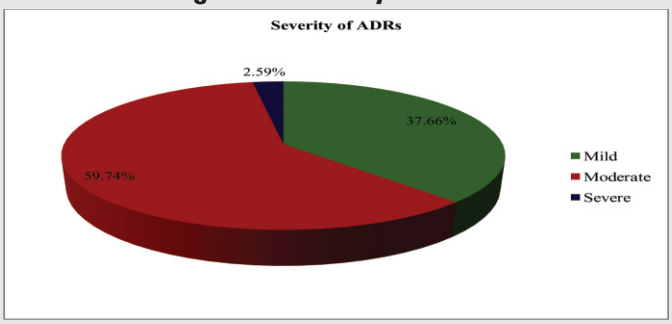



**Figure 3.Severity of ADRs**




**Conclusion:** UTI are one amongst the opportunistic infections after renal transplantation, untreated UTI may lead to significant mortality. Hence patients should be monitored throughout the post transplant treatment period including Immunosuppressive therapy and Antibiotic treatment. A proper monitoring of given treatment through the treatment period can reduce the incidence of preventable ADRs such that the term patient safety is the utmost priority can be justified.

**References:**

1. Parasuraman R, Julein K. Urinary Tract Infections in Solid Organ Transplantation. American Journal of Transplantation 2013; 13(4): 327-329.

2. Karunanayakey L. Post Transplant UTI and Surgical Site Infections among Renal Transplant Recipients in a Transplant Unit in Sri Lanka. Indian Journal of Transplantation 2018; 11(3): 31-34.

# DRUG PROFILE

## TENAPANOR indicated for the treatment of inflammatory bowel syndrome with constipation in adults.

**V. Gurupriya, Pharm D Intern**

| | |
|---|---|
| Approved Date | : September, 2019 |
| Brand Name | : IBSRELA |
| Generic Name | : Tenapanor |
| Manufacturing Company | : Ardelyx Pharmaceuticals. |
| Dosage forms, Strength | : Tablet, 50 mg |
| Molecular Formula | : C 50H68Cl 6N8O10S2 |
| Molecular Weight | : 1218 Daltons. |

**Pharmacokinetics:**

**Absorption:** Plasma concentration <0.5ng/ml

1 Plasma protein binding of tenapanor and its major metabolite M1 is approximately 99% and 97% respectively.

**Elimination:**

Metabolism: Metabolised primarily by CY3A4/5, C max of M1 is 13ng/mL.

**Excretion:** Feces-70%,1.5% unchanged in urine.

**Indications and Usage:**

IBSRELA is indicated for treatment of irritable bowel syndrome with constipation in adults.

**Pregnancy:**

Not identified any drug associated risk for major birth defects, miscarriage.

**Adverse drug reactions:**

Diarrhoea, Abdominal distension, Flatulence, Dizziness.

**Contraindications:**

Patients < 6 years of age due to risk of dehydration.

**Lactation:**

No data available on the presence of drug in either human or animal milk. The minimal systemic absorption of tenapanor will not result in clinically relevant exposure to breastfed infants.

**Mechanism:**

• Inhibits sodium hydrogen exchanger 3(NHE3),an antiporter expressed on apical surface of small intestine and colon responsible for absorption of dietary sodium, results in an increase in water secretion into the intestinal lumen, there by softs the stool consistency.

Also reduce abdominal pain by decreasing visceral hypersensitivity.

# A RARE CASE REPORT ON PYRAZINAMI DE INDUCED PHOTODERMATITS IN A TERTIARY CARE TEACHING HOSPITAL

**Heena Kauser. A, Saranya. T**

## CASE STUDY

Diagnosed to have tuberculosis and started on anti-ttuberculosis treatment (ATT) with rifampicin (RIF), isoniazid (INH), ethambutol (E) and pyrazinamide (PZA) in appropriate doses. However after 15 days of the treatment, she developed mild rashes on face, arms on exposure to sun. Later these rashes became more intense and severe that patient rushes to the hospital, there the patient was suspected to drug induced hypersensitivity reaction and suggested to stop all the ATT drugs and started on antibiotics, steroids, hydration and avoidance of sunlight. After eight days, the rashes subsided and ATT drugs were re-introduced one by other and steroids were tapered. Thus on observation the patient was diagnosed as PZA induced photodermatitis and PZA was discontinued and the patient was advised to avoid sunlight wearing mask and gloves to protect face and hands from sunlight and use sun block creams. After 3 months the patient recovered.

## DISCUSSION

Photodermatitis is the abnormal chemically induced reaction of the skin which develops itchy rashes on exposed skin to sunlight [5]. Symptoms usually appears on the sun exposed areas of the body such as back of hands, front of arms, lower areas of legs and face [6] . In the above case, it was proven that PZA is the offending drug to cause photodermatitis.

There are very few reports showing PZA induced rashes in literature [4-6]. Allergic skin reactions to PZA are usually mild and liable to occur in approximately 3% of cases [7]. Most allergic reactions occur within the first four weeks of therapy and mainly present with a fever and/or skin rash. With PZA, It is estimated that 1 in 100 persons show some signs of photosensitivity. Photosensitivity reaction is caused by an interaction between light rays and a photosensitizing agent (chromophore) which is activated after absorbing the light ray and it is more common on the skin due to natural exposure to the sun rays .

## CONCLUSION

This case emphasizes the occurrence of photodermatitis consequently upon PZA use, an adverse reaction that has been described with the usage of ATT drugs. Taking this case into consideration, the frequency of occurring this adverse event on PZA use in the anti-tuberculosis treatment and reporting it to the pharmacovigilance (PV), provides a good sign for developing spontaneous reporting system of rare cases in PV centers to improve patient safety.

## Departmental Activities in September- 2019

| ACTIVITIES | NUMBER |
|---|---|
| Patient Counselling | 920 |
| Drug Information Services | 32 |
| Adverse Drug Reactions | 09 |
| Medication Errors | 08 |

# Perfect Clicks



Pharmacist day celebrations with Public awareness Rally



Pharmacist day Celebrations in SVIMS-SPMCWH


Educational Trip to Regional Science centre

Personality Development programme

Awareness campaign on ensuring 100% open defecation free