JSS ACADEMY OF HIGHER EDUCATION & RESEARCH
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CLINICAL PHARMACY NEWSLETTER

A Newsletter of Drug and Prescribing Information

Published by
Clinical Pharmacy Services Department, Govt. Medical College & Hospital, Ooty
(A Unit of Department of Pharmacy Practice, JSS College of Pharmacy, Ooty)

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INSIDE THIS ISSUE

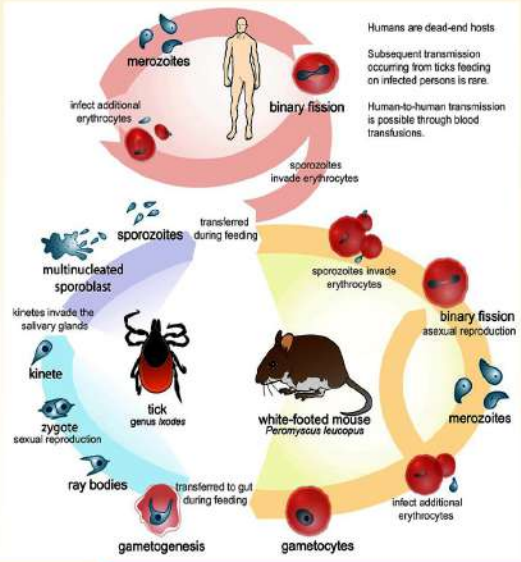
BABESIOSIS

Introduction:
Babesiosis or piroplasmosis is a malaria-like parasitic disease caused by infection with a eukaryotic parasite in the order Piroplasmida, typically a Babesia or Theileria, in the phylum Apicomplexa.

Aetiology:
Babesiosis is caused by microscopic parasites that infect red blood cells and are spread by certain ticks. Babesiosis is spread by the bite of an infected blacklegged (or deer) tick, Ixodes scapularis. It can also be spread by transfusion of contaminated blood and possibly from an infected mother to her baby during pregnancy or delivery.

Clinical presentations:
Initial symptoms begin gradually and are nonspecific. Common symptoms include the following: Malaise, Fatigue, Anorexia, Shaking chills, Fever – This may be sustained or intermittent, and temperatures may be as high as 40°C, Diaphoresis, Headache, Myalgias, Arthralgias.

Pathophysiology:
The nymphal stage of the Ixodes is the primary vector and typically requires attachment to a host for at least 36 to 72 hours to complete a blood meal. If the tick is carrying the protozoa, the second or third day of attachment is typically when the babesia infection occurs with the transmission of sporozoite forms.
These sporozoites attach and enter erythrocytes where they mature and divide via binary fission to form merozoites. These merozoites then leave the host erythrocyte, rupturing the cell, and go on to infect other erythrocytes, repeating the cycle above. The spleen is essential in the host's ability to control this infection.



Erythrocytes infected with Babesia are recognized as abnormal as they pass through the spleen and are targeted for destruction by macrophages. People with a history of splenectomy are at high risk for severe infection with high-level parasitaemia. Other high-risk populations include those with HIV, older than 50 years, neonates, and immunosuppressed patients (particularly TNF inhibitors or CD20 antibody).

As Per the IDSA, the recommended regimens in adults are as follows:
Ambulatory adults with mild-moderate disease:
First line: Atovaquone 750 mg PO q12h plus Azithromycin 500 mg PO on day one, followed by 250 mg PO q24h for 7-10 days.

- Alternative treatment: Clindamycin 600 mg PO q8h plus Quinine sulphate 542 mg base (equal to 650 mg salt) PO q6-8h for 7-10 days.

Hospitalized adults with acute severe disease:

- First line: Atovaquone 750 mg PO q12h plus Azithromycin 500-1000 mg IV q24h until symptoms improve, then convert to step-down therapy.

Alternative treatment:
Clindamycin 600 mg IV q6h plus Quinine sulphate 542 mg base (equal to 650 mg salt) PO q6-8h until symptoms improve, then convert to step-down therapy.

Hospitalized adults, step-down therapy:

- *First line:* Atovaquone 750 mg PO q12h plus Azithromycin 250-500 mg PO q24h; total course of therapy is usually 7-10 days. Consider using a higher dose of Azithromycin (500-1000 mg) in immunocompromised patients.

- *Alternative treatment:* Clindamycin 600 mg PO q8h plus quinine sulphate 542 mg base (equal to 650 mg salt) PO q6-8h; total course of therapy is usually 7-10 days.

In case of Severely ill Patients:
Exchange transfusion is employed in patients who are profoundly ill with high levels of parasitaemia and haemolysis.
In severe cases of babesiosis—as demonstrated by high parasitaemia (>10%), significant haemolysis, or renal, hepatic, or pulmonary dysfunction—it may be lifesaving. When used concurrently with chemotherapy, exchange transfusion reduces the level of parasitaemia and may remove toxic erythrocyte, babesial, or macrophage-produced factors.

Monitoring Parameters:

Monitor the level of oxygenation, and watch for the development of respiratory complications after the initiation of treatment in patients who present with respiratory complaints. Respiratory distress may be due to endotoxin sensitivity; endotoxin release often results from medication-induced intraerythrocytic death of the parasites. Mechanical ventilation may be necessary in patients with severe disease.

Prevention:

- During outdoor activities in tick habitats, take precautions to keep ticks off the skin.
- Minimize the amount of exposed skin, by wearing socks, long pants, and a long-sleeved shirt. Tuck the pant legs into the socks, so ticks cannot crawl up the inside of the pants.
- After outdoor activities, conduct daily tick checks and promptly remove any ticks that are found.
- Apply repellents to skin and clothing.

References:

1. Babesiosis treatment & management [Internet]. Medscape.com. 2021 [cited 2023 Dec 13]. Available from: https://emedicine.medscape.com/article/212605-treatment
2. Zimmer AJ, Simonsen KA. Babesiosis. StatPearls Publishing; 2023.

Hypoglycaemia, "Out of Sight and Out of Mind"

Definition

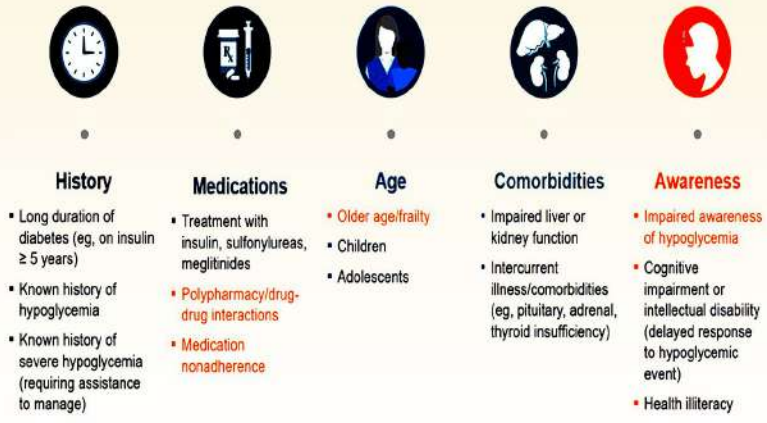
It's defined as 3 levels by the American Diabetes Association (ADA), and American Association of Clinical Endocrinology (AACE), and Endocrine Society (ENDO).

- Level 1 is a blood sugar of less than 70 mg/dL (but greater than or equal to 54 mg/dL), and someone might have neurogenic symptoms, so shaking or tachycardia, so having palpitations, sweating.
- Level 2 is less than 54 mg/dL, and they might start seeing cognitive impairments. So these are neuroglycopenic symptoms, behavioural problems. They might be combative, they might be dizziness, blurvred vision.
- Level 3 is when someone might have altered mental status or physical status. They're requiring help or requiring assistance. They're requiring emergency treatment, really. And this might not be recognized. This might lead to loss of consciousness, seizure, coma, death. So, this is the one where we want to make sure anyone who's at risk of a level 2 or a level 3 reaction has access to glucagon.

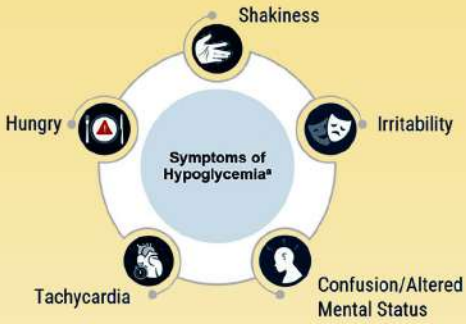
Etiology

* Hypoglycemia occurs because of too high dose of insulin or medications like sulfonylureas (glyburide, glipizide and others), or a change in diet or exercise without adjusting glucose-lowering medications.
* Hypoglycemia can occur, although rarely, in people who do not have diabetes. When it does occur outside of diabetes, hypoglycemia can be caused by a variety of medical problems. A partial list includes:

- A pancreatic tumor, called an insulinoma, that abnormally secretes insulin
- Alcohol
- Overdose of aspirin
- Severe liver disease
- Deficiency of enzymes like glucose-6-phosphatase, liver phosphorylase and pyruvate carboxylase.



Symptoms OF Hypoglycemia



Prevention:

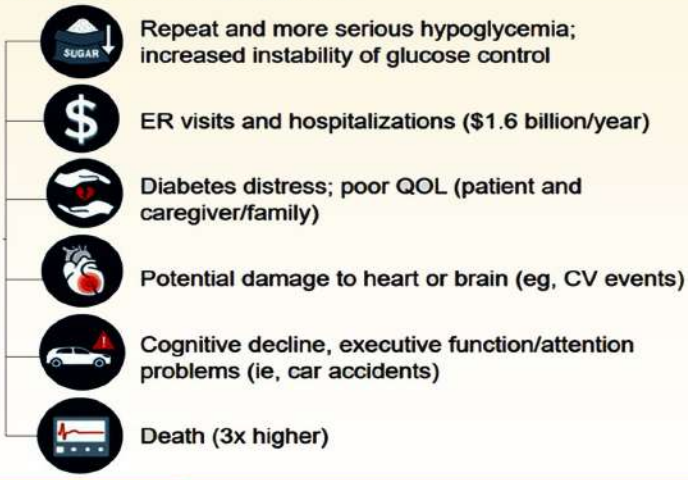
Monitoring blood glucose, with either a meter or a CGM, is the tried and true method for preventing hypoglycemia. Studies consistently show that the more a person checks blood glucose, the lower his or her risk of hypoglycemia. This is because you can see when blood glucose levels are dropping and can treat it before it gets too low.

Check often!

- Check before and after meals.
- Check before and after exercise (or during, if it's a long or intense session).
- Check before bed.
- After intense exercise, also check in the middle of the night.

Check more if things around you change such as, a new insulin routine, a different work schedule, an increase in physical activity, or travel across time zones.

Complications of Hypoglycemia



Management of Hypoglycemia—The "15-15 Rule"

* The 15-15 rule—have 15 grams of carbohydrate to raise the blood glucose and check it after 15 minutes. If it's still below 70 mg/dL, have another serving.

* Repeat these steps until the blood glucose is at least 70 mg/dL. Once the blood glucose is back to normal, eat a meal or snack to make sure it doesn't lower again.

This may be:

- Glucose tablets
- Gel tube
- 4 ounces (1/2 cup) of juice or regular soda (not diet)
- 1 tablespoon of sugar, honey, or corn syrup
- Hard candies, jellybeans, or gumdrops

* Many people tend to eat as much as they can until they feel better. This can cause blood glucose levels to shoot way up. Using the step-wise approach of the "15-15 Rule" can help to avoid hypoglycemia, preventing high blood glucose levels.

* Young children usually need less than 15 grams of carbs to fix a low blood glucose level: Infants may need 6 grams, toddlers may need 8 grams, and small children may need 10 grams. This needs to be individualized for the patient, so discuss the amount needed with diabetes team.

* When treating a low, the choice of carbohydrate source is important. Complex carbohydrates, or foods that contain fats along with carbs (like chocolate) can slow the absorption of glucose and should not be used to treat an emergency low.

Treating severe hypoglycemia

* Glucagon is a hormone produced in the pancreas that stimulates the liver to release stored glucose into the bloodstream when blood glucose levels are too low. Glucagon is used to treat someone with diabetes when their blood glucose is too low to treat using the 15-15 rule.

* Glucagon is available by prescription and is either injected or administered or puffed into the nostril. For those who are familiar with injectable glucagon, there are now two injectable glucagon products on the market—one that comes in a kit and one that is pre-mixed and ready to use.

* The patient oy their caretakers (for example, friends, family members, and coworkers) should be instructed on how to give glucagon to treat severe hypoglycemia.

Do NOT:

* Inject insulin (it will lower the person's blood glucose even more)
* Provide food or fluids (they can choke)

References:

1.https://www.medscape.org/viewarticle/996424_print
2.Agiostratido G, et al. Diabetes Care 2017;40:1622-1630;
3.Elsayed NA, et al. Diabetes Care. 2023;46(Suppl.1):S97-S110
4. American Diabetes Association. TREATMENT & CARE Hypoglycemia (Low Blood Glucose). https://diabetes.org/living-with-diabetes/treatment-care/hypoglycemia#:~:text=The%2015%2D15%20rule%E2%80%94have,at%20least%2070%20mg%2FdL.

DRUG PROFILE
BEXAGLIFLOZIN (BRENZAVVY)

Pharmacological Class: sodium-glucose co-transporter 2 (SGLT2) inhibitor

Indications:

* Bexagliflozin is indicated as an adjunct to diet and exercise to improve glycemic control in adults with type 2 Diabetes mellitus.

Limitations of Use

Bexagliflozin is not recommended in patients with type 1 diabetes mellitus. It may increase the risk of diabetic ketoacidosis in these patients.

Dosage Form and Administrations

Tablets: 20 mg.

* 20 mg orally taken once daily in the morning, with or without food
* Do not crush or chew the tablet.
* If a dose is missed, take the missed dose as soon as possible. Do not double the next dose.

Monitoring Parameters

*Assess renal function prior to initiation of Bexagliflozin and periodically thereafter as clinically indicated

* Assess volume status-In patients with volume depletion, correct this condition before initiating Bexagliflozin.

Contraindications

* Not recommended in patients with an eGFR less than 30 mL/min/1.73 m2
* Contraindicated in patients on dialysis
* With hypersensitivity to Bexagliflozin or any excipient in Brenzavvy.

*Anaphylaxis and angioedema have been reported with sodium-glucose co-transporter 2 (SGLT2) inhibitors.

Precautions and Warnigs

**Ketoacidosis*-Reports of ketoacidosis, a serious life-threatening condition requiring urgent hospitalization, have been identified in clinical trials and postmarketing surveillance in patients with type 1 and type 2 diabetes mellitus who received SGLT2 inhibitors, including Bexagliflozin.

**Lower Limb Amputation*-An increased incidence of lower limb amputations occurred in Bexagliflozin-treated patients compared to placebo-treated patients.

**Volume Depletion*-Bexagliflozin can cause intravascular volume contraction which may sometimes manifest as symptomatic hypotension or acute transient changes in creatinine.

**Urosepsis and Pyelonephritis*-There have been reports of serious urinary tract infections, including urosepsis and pyelonephritis, requiring hospitalization in patients receiving SGLT2 inhibitors, including Bexagliflozin.

**Necrotizing Fasciitis of the Perineum*-Patients treated with Bexagliflozin presenting with pain or tenderness, erythema, or swelling in the genital or perineal areas, along with fever or malaise, should be assessed for necrotizing fasciitis.

Drug Interactions

UGT Enzyme Inducers

Clinical Impact: UGT Enzyme Inducers may significantly reduce exposure to Bexagliflozin and lead to decreased efficacy.

Intervention: Consider adding another antihyperglycemic agent in patients who require additional glycemic control.

Concomitant Use with Insulin and Insulin Secretagogues

Clinical Impact: The risk of hypoglycemia is increased when Bexagliflozin is used in combination with insulin and/or an insulin secretagogue.

Intervention: A lower dose of insulin or insulin secretagogue may be required to minimize the risk of hypoglycemia when used in combination with Bexagliflozin.

Lithium

Clinical Impact: Concomitant use with SGLT2 inhibitors such as Bexagliflozin may decrease serum lithium concentrations.

Intervention: Monitor serum lithium concentration more frequently upon Bexagliflozin initiation and discontinuation.

Positive Urine Glucose Test

Clinical Impact: SGLT2 inhibitors increase urinary glucose excretion and will lead to positive urine glucose tests.

Intervention: Monitoring glycemic control with urine glucose tests is not recommended in patients taking SGLT2 inhibitors. Use alternative methods to monitor glycemic control.

Interference with 1,5-anhydroglucitol (1,5-AG) Assay

Clinical Impact: Measurements of 1,5-AG are unreliable in assessing glycemic control in patients taking SGLT2 inhibitors.

Intervention: Monitoring glycemic control with 1,5-AG assay is not recommended. Use alternative methods to monitor glycemic control.

Use in Special Popuations

Pregnancy: Based on animal data showing adverse renal effects, Bexagliflozin is not recommended during the second and third trimesters of pregnancy.

Disease-Associated Maternal and/or Embryo/Fetal Risk: Hypoglycemia and hyperglycemia occur more frequently during pregnancy in patients with pre-gestational diabetes. Poorly controlled diabetes in pregnancy increases the maternal risk for diabetic ketoacidosis, preeclampsia, spontaneous abortions, preterm delivery, and delivery complications.

Lactation: There is no information regarding the presence of bexagliflozin in human milk, the effects on the breastfed infant or the effects on milk production. Bexagliflozin is excreted in the milk of lactating rats (see Data). When a drug is present in animal milk, it is likely that the drug will be present in human milk.

Pediatric Use: The safety and effectiveness of Bexagliflozin have not been established in pediatric patients.

Renal Impairment: Bexagliflozin is contraindicated in patients receiving dialysis and is not recommended in patients with an eGFR less than 30 mL/min/1.73 m2 due to the decline of the glucose lowering effect of Bexagliflozin and reduction in urine output in these patients.

.Hepatic Impairment: Bexagliflozin has not been studied in patients with severe hepatic impairment and is not recommended for use in this patient population.

Overdosage

In the event of an overdose of Bexagliflozin, consider contacting the Poison Help line (1-800-222-1222) or a medical toxicologist for additional overdosage management recommendations. Employ the usual supportive measures as dictated by the patient's clinical status. Removal of bexagliflozin by hemodialysis has not been studied.

"Bexagliflozin does not help patients who have insulin-dependent or type 1 diabetes"

Mechanism of Action

- Bexagliflozin is an inhibitor of sodium-glucose co-transporter 2 (SGLT2), the transporter responsible for reabsorption of the majority of glucose from the renal glomerular filtrate in the renal proximal tubule.
- By inhibiting SGLT2, Bexagliflozin reduces renal reabsorption of filtered glucose and lowers the renal threshold for glucose, and thereby increases urinary glucose excretion.

Pharmacodynamics

Urinary Glucose Excretion and Urinary Volume: Dose-dependent increases in urinary glucose excretion (UGE) accompanied by increases in urine volume were observed in healthy subjects and in adults with type 2 diabetes mellitus following single- and multiple-dose administration of bexagliflozin. Dose-response analysis indicates that 20 mg bexagliflozin provides near-maximal UGE. Elevated UGE was maintained after multiple-dose administration.

Cardiac Electrophysiology: At 5 times the recommended dose, bexagliflozin does not prolong the QTc interval to any clinically significant extent.

Pharmacokinetics

The pharmacokinetics of bexagliflozin are similar in healthy subjects and adults with type 2 diabetes mellitus. Following dosing in the fasted state, mean Cmax and AUC0-∞ were 134 ng/mL and 1,162 ng·h/mL, respectively.

Bexagliflozin does not exhibit time-dependent pharmacokinetics and accumulates in plasma up to ~20% following multiple dosing.

Absorption: Following oral administration of BRENZAVVY, peak plasma concentrations of bexagliflozin were reached between 2 – 4 hours post-dose and can be delayed if taken after a meal or by medications that slow gastric emptying.

Distribution: Bexagliflozin is approximately 93% bound to plasma protein. Neither renal nor hepatic impairment substantially alters protein binding. The apparent volume of distribution is 262 L.

Metabolism: Bexagliflozin is mainly metabolized by UGT1A9 and, to a lesser extent, CYP3A. In plasma the most abundant metabolite is the pharmacologically inactive 3-O-glucuronide, which was found to constitute 32.2% of the parent compound AUC in a radiolabeled tracer study.

Excretion: The apparent oral clearance of bexagliflozin is 19.1 L/h by population pharmacokinetic modeling. The apparent terminal elimination half-life of bexagliflozin was approximately 12 hours.

Carcinogenesis, Mutagenesis, Impairment of Fertility

Carcinogenesis: Carcinogenesis was evaluated in 2-year studies in CD-1 mice at oral gavage doses of 15, 50, and 150 mg/kg/day and in Sprague-Dawley (SD) rats at 3, 10, and 30 mg/kg/day.

Mutagenesis: Bexagliflozin was not mutagenic or clastogenic with or without metabolic activation in the in vitro Ames bacterial mutagenicity assay, the in vitro CHO cell assay, an in vivo micronucleus assay in rats, and an in vivo unscheduled hepatic DNA synthesis study in rats.

Impairment of Fertility: Bexagliflozin had no effects on mating, fertility or early embryonic development in male or female rats at any dose up to the highest dose of 200 mg/kg/day, which resulted in exposures 280 times (males) and 439 times (females) the 20 mg clinical dose (based on AUC).

Reference:

https://www.accessdata.fda.gov/drugsatfda_docs/label/2023/214373s000lbl.pdf

Publications from the Department of Pharmacy Practice (July to September)

- Rinu Mary Xavier, Sharumathi S.M., Arun KP, Deepalakshmi Mani, Tharani Mohanasundaram. Limited sampling strategies for therapeutic drug monitoring of anti-tuberculosis medications: A systematic review of their feasibility and clinical utility. Tuberculosis. 2023; 141, 102367.

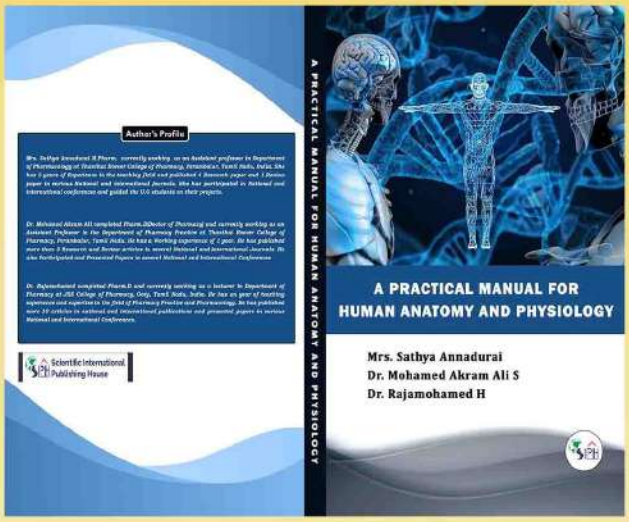
- Varshini E, Mohamed Akram Ali S, Rajamohamed H, Helina N, Vinoth Kumar S. Antibiotic Treatment for Scrub Typhus: A PRIMS-Compliant Systematic Review and Meta-Analysis, Journal of Neurological, Psychiatric and Mental Health Nursing. 2023;6(1),1-5.

- Dr. Rajamohamed, published a book on the topic "A Practical Manual for Human Anatomy and Physiology" by Scientific International Publishing House. ISBN: 978-93-5757-923-0


Tuberculosis

Limited sampling strategies for therapeutic drug monitoring of anti-tuberculosis medications: A systematic review of their feasibility and clinical utility

Abstract



EVENT CORNER

Awards and Achievements by the Faculties

- Dr. S. Ponnusankar, Dr. K.P. Arun, Dr.M.Deepalakshmi, Mr.Vishwas H N, Dr.Mohsina Hyder, Dr. S. Vikashini, Mr. Sabarish Sachithanandan J & Dr. Rajamohamed H performed a role as a Members-Organizing committee in Two days national seminar on current status and precision medicine organized by JSS College of Pharmacy, Ooty on 01.09.2023 to 02.09.2023.
- Dr. M. Deepalakshmi, Mr. Vishwas H N, Dr.Mohsina Hyder & Mr. Sabarish Sachithanandan J, performed a role as an Evaluators in Two days national seminar on current status and precision medicine organized by JSS College of Pharmacy, Ooty on 01.09.2023 to 02.09.2023.
- Dr. S. Ponnusankar, acted as a Convener in Free Medical camp for the Tribal People organised by TIFAC CORE in herbal drugs, JSS College of Pharmacy, Ooty on 24.09.2023.
- Dr. K.P. Arun & Dr Rajamohamed H, performed a role as a Members-Organizing committee in Free Medical camp for the Tribal People organised by TIFAC CORE in herbal drugs, JSS College of Pharmacy, Ooty on 24.09.2023.
- Dr. M. Deepalakshmi, acted as an Organizing Secretary in Free Medical camp for the Tribal People organised by TIFAC CORE in herbal drugs, JSS College of Pharmacy, Ooty on 24.09.2023.
- Dr. M. Deepalakshmi performed a role as an Organizer in Blood donation camp organised by JSS College of Pharmacy, Ooty on 25.09.2023.

Faculty as Resource Person

- Dr. M.Deepalakshmi Assistant Professor delivered a talk on "Menstruation Hygine management" in the conference entitled "Maternity, Menstruation and Mental Health awareness among Tribal womens, orphanage, adolescent girls, college girls in the Nilgiris district" organised by Department of Pharm. Chemistry & Department of Pharmacognosy, JSS College of Pharmacy, Ooty on 11.08.2023

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- Mr. Vishwas H N, Lecturer delivered a talk on "Mechanisms behind Menstrual cramps" in the conference entitled "Maternity, Menstruation and Mental Health awareness among Tribal womens, orphanage, adolescent girls, college girls in the Nilgiris district" organised by Department of Pharm. Chemistry & Department of Pharmacognosy, JSS College of Pharmacy, Ooty on 11.08.2023

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- Dr. K.P. Arun, Asspciate Professor delivered a talk on Mental health awareness in adolescent girls in the event entitled "Maternity, Menstruation and Mental Health Awareness Among Tribal Women's, Orphanage Adolescent Girls, College Girls in The Nilgiris District" organised by JSS College of Pharmacy, Ooty on 11.08.2023.

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- Dr. K.P. Arun, Asspciate Professor delivered a talk on Precision Medicine: From Science to Value in the national level seminar entitled "Two days national seminar on current status and precision medicine" organised by Department of Pharmacy Practice, JSS College of Pharmacy, Ooty on 01.09.2023 & 02.09.2023.

Industrial Expert Interaction series 2023- Lecture 01
(Enhancing interpersonal and professional skills)

Name of the presenter:
Ms. Indu Nambiar
Local Patient Safety Lead
Boehringer Ingelheim India Pvt. Ltd.
Mumbai.
Title of the presentation: Audits & Regulatory inspections
Date: 21.07.2023
Organized by: Dept. of Pharmacy Practice & Pharmacy Education Unit, JSS College of Pharmacy, Ooty.

The Industrial expert interaction series was hosted in online platform 'Google meet'. Ms. Indu started the session with the basics of audit and its purpose in clinical research. Further she explained the differences between audits and inspections. She also explained the various types of audits and inspections. She gave many examples of clinical research scenarios where audits and inspections are conducted. She stressed on points like, whenever a sponsor or regulatory authorities suspect fraudulent activities or misleading information from clinical research, this usually attracts audits and inspections. Ms Indu explained detailed about how the USFDA will perform the inspection. Finally, Ms Indu explained in detail about the procedures involved before and after an audit is done. She told her insights about preparation of audit report followed by interaction with students for any doubts. The event was coordinated by Dr. Sivasankaran Ponnusankar & Mr Vishwas H N. A total of 86 participants were present at the session.

Two days of National Seminar on Current Status and Future Perspectives of Precision Medicine

Convenor: Dr. S. Ponnusankar
Organising Secretary: Dr. M. Deepalakshmi
Date: 1st & 2nd September 2023
Organized by: Department of Pharmacy Practice, JSS College of Pharmacy, Ooty
Venue: JSS College of Pharmacy, Ooty.

Two Days National Seminar on 'Current Status and Future Perspectives of Precision Medicine' was organized on 1st & 2nd of September 2023 by the Department of Pharmacy Practice, JSS College of Pharmacy, Ooty with the financial support received from DBT – CTEP and JSS AHER Mysuru, and the Indian Pharmaceutical Association, The Nilgiris Local Branch.

The Objectives of the seminar were to bring together the leading academic scientists, researchers, and research scholars to exchange and share their experiences and research results on all aspects of precision medicine, raise awareness of the clinical applications of pharmacogenomics, and increase enthusiasm for implementing pharmacogenomic testing in the clinic and to create a forum with the help of local and national leaders in the field, for faculty to identify shared interests, foster research ideas and develop interdisciplinary collaborations.

A total of 398 delegates participated in the seminar. As a part of said objectives of the seminar, abstracts for the E-poster / Oral Presentations were invited and around 45 E-poster presentations and Oral Presentation each were held during the day one of the seminar. The welcome address was given by Dr S Ponnusankar, Professor and Head, Department of Pharmacy Practice. The genesis of the seminar was briefed by Dr M Deepalakshmi. The chief guest address was given by Dr K Bangaru Rajan (Dy. Drug Controller (Rtd.), CDSCO. The presidential address was given by Dr S P Dhanabal, Principal, JSS College of Pharmacy, Ooty. The seminar was conducted for two days and the session was segregated into 7 and each session was engaged by 7 different speakers who were expertised in precision medicine. The resource persons were Dr Vikram Gota, Professor and Head, Clinical Pharmacology, ACTREC, Mumbai on the topic of 'Precision Medicine in Oncology, Dr. Arun KP about the science, values, and fundamentals of precision medicine, Dr Surulivel Rajan M, Professor and Head, Department of Pharmacy Practice, MCOPS, MAHE, Manipal spoke about pharmacogenomics and its implications in clinical practice. Dr Akila Prashant, Professor and Head, Department of Biochemistry who spoke about the emerging role of precision medicine in cardiovascular disorders and Dr Deepa Bhat, Genetic Counselor, JSS Medical College and Hospital on the topic 'The role of genetic counselors in the era of precision medicine'. Dr Jayanthi, Professor of Pharmacology, JIPMER, Puducherry on the topic of 'the role of preventing organ toxicities of cancer chemotherapy', and Dr S Sriram, Professor and Head, Department of Pharmacy Practice, College of Pharmacy, SRIPMS, Coimbatore spoke about precision medicine in psychiatry and the current implementation strategies for antidepressant and antipsychotic medications.

The two-day seminar was concluded with a brief valedictory ceremony in which the report about the seminar was presented by Mr H N Vishwas, Member of the Organizing Committee. The best e-poster and oral presentations were awarded in the valedictory function. All the delegates and volunteers were distributed with certificates by the dignitaries. Dr Arun KP, Vice-Principal proposed the vote of thanks, and the seminar was closed with the National Anthem.

Stress on for a policy on precision medicine

Ooty, Sept 6: A national seminar on the 'Current Status and Future Perspectives of Precision Medicine' was organized at JSS College of Pharmacy, Ooty on the 1 st and 2 nd September 2023.

Dr. Vikram Gota, Professor & Head, Department of Clinical Pharmacology, ACTREC, TATA Memorial Hospital, Mumbai delivered a keynote address on the topic 'Precision Medicine in Oncology' and highlighted here the safety and efficacy of the anticancer treatments are optimized with the help of the genetic make-up of the individual patients. Researchers from premier institutes including JIPMER, Pondicherry, Manipal Academy of Higher Education, Manipal, JSS Academy of Higher Education & Research, Mysuru and Sri Ramakrishna Institute of Paramedical Sciences, Coimbatore delivered scientific talks on various facets of Precision Medicine. About 400 delegates from 25 colleges across 6 States participated in the program. About 100 Scientific Findings on various areas of healthcare were presented by the delegates and the research works were awarded prizes.

Dr K Bangaru Rajan retired deputy drug controller, CDSCO & Professor, JSS College of Pharmacy, Mysuru was the chief guest of the function and Dr C Saravana Babu, Director, Centre for Experimental Pharmacology & Toxicology, JSS Academy of Higher Education & Research, Mysuru was the guest of honour at the inauguration.

Dr. S P Dhanabal, Principal gave the presidential address and Dr Arun K.P, Vice-Principal proposed the vote of thanks. Dr M Deepalakshmi, Assistant Professor & Dr S Ponnusankar, Professor & Head, Department of Pharmacy Practice coordinated the two-day event. seminar

Basic Life Support (BLS) training – Effective management of cardiac and respiratory patients

Organized by: Dept. of Pharmacy Practice, JSS College of Pharmacy, Ooty
Venue: Auditorium, JSS College of Pharmacy, Ooty
Date: 27 September 2023
Speakers: Dr. Jayaganesh Moorthy, Senior Consultant, Dept. of Orthopedics, Govt. Medical College &Hospital, Ooty
Dr Logharaj, Senior Consultant, Dept. of Orthopedics, Govt. Medical College & Hospital, Ooty
Dr Arunjith, Asst. Professor, Dept. of Emergency Medicine, Govt. Medical College & Hospital, Ooty

The first Continuing Pharmacotherapy Education (CPhE) Programme (Academic year 2023-24) on "Basic Life Support" training – Effective management of cardiac and respiratory patients" was organized on September 27, 2023 between 2 to 4 PM at Auditorium, JSS College of Pharmacy, Ooty. The CPE programme was jointly organized by Dept. of Pharmacy Practice.

Dr Jayaganesh Moorthy, Dr Logharaj and Dr Arun Ajith, Govt. Medical College & Hospital, Ooty was invited as a resource person for this programme to deliver the lecture on the emergency management of cardiac and respiratory patients and demonstration using the mannequins. Totally 70 participants from IV, V & VI PharmD, and M.Pharm (Pharmacy Practice) specializations were participated in the CPhE programme. Dr. S. Ponnusankar, Head, Dept. of Pharmacy Practice welcomed the gathering and introduced the speaker to the students.

Dr Jayaganesh Moorthy has commenced his talk with Basic Life Support, or BLS, generally refers to the type of care that first-responders, healthcare providers and public safety professionals provide to anyone who is experiencing cardiac arrest, respiratory distress, or an obstructed airway. It requires knowledge and skills in cardiopulmonary resuscitation (CPR), and relieving airway obstructions in patients of every age. All the three speakers explained the process of CPR as per 2020 American Heart Association (AHA) Guidelines by using the mannequin.
Recognize the emergency by activating the emergency response system — If witnessed a collapse followed by a loss of consciousness.
Immediately begin performing high-quality CPR — Begin chest compressions at a rate of 100–120 compressions per minute and at a depth of 2–2.4 inches.
Provide rapid defibrillation — When the AED arrives, attach the pads to the victim's bare chest, turn the device on, and follow the prompts.
At the end of the session students were given hands-on training using the mannequin to perform CPR. After the theory content and steps involved in the basic life support was explained utilizing the mannequins and students learned the same by practical experience. Around 70 students participated and benefited from this BLS training program.



Blood Donation Camp-2023

Organized by: Dept. of Pharmacy Practice, JSS College of Pharmacy, Ooty & IPA - Nilgiris Local Branch
Date: 25th September 2023
Venue: JSS College of Pharmacy, Ooty
Total Number of Donors: 100 Nos

JSS College of Pharmacy, Ooty (JSSCPO) Celebrated the 108th Jayanthi of His Holiness Jagadguru Dr Sri Shivarathri Rajendra Mahaswamiji & the World Pharmacists Day with series of social welfare activities & professional activities including Blood Donation Camp.

Department of Pharmacy Practice in association with Indian Pharmaceutical Association and National Service Scheme of JSS College of Pharmacy, Ooty with the support of Blood Bank Unit of Government Medical College and Hospital, Ooty organized a blood donation camp at JSS College Auditorium on 25.09.2023. The blood donation camp was inaugurated by Dr S P Dhanabal, Principal, Dr K P Arun, Vice Principal, Mr H K Basavalingadevaru, Administrative officer, JSS College of Pharmacy. As the staff and student volunteers of the club showed an overwhelming response and registered for the blood, about 55 units of blood were donated. Dr M Deepalakshmi, Assistant Professor, Department of Pharmacy Practice, the coordinator of the blood donation camp with the guidance of Dr S Ponnusankar, Professor & Head, Department of Pharmacy Practice made all the arrangements.



Free Medical Camp for the Tribal People

Organised by: Dept. of Pharmacy Practice, JSS College of Pharmacy, Ooty & Dept. of Pharmacognosy, JSS College of Pharmacy, Ooty
Date: 24 September 2023
Venue: MDPA, Cinchona village, Doddabetta

JSSCPO - As part of the 108th Jayanthi Celebrations of His Holiness Jagadguru Dr. Sri Shivarathri Rajendra Mahaswamiji of Sri Suttur Math, 'A Free Medical Camp for the Tribal People's was organized on 24.09.2023 at Chinchona Village in Doddabeta Panchayat of the Nilgiris District. The free medical camp was started at 11.00 AM where two doctors Dr. Bhavesh, MBBS., MD., and Dr. J Subramani, MD serving in the Government Hospital & Primary Health Centre respectively diagnosed the patients and given medical advice followed by further follow up at higher healthcare centers as required. Simple diagnostic tests viz. Blood Pressure, Random Blood Sugar, Hemoglobin, etc. were performed for the patients. Free medicines for minor ailments were also dispensed. About 50 patients, including pediatrics benefited by this camp. The patients were also counselled by the PharmD interns about the medications, diseases, and lifestyle modifications as appropriate. Also, the patients contact details were collected for the follow-up actions.

The TIFAC CORE in HD, Department of Pharmacognosy and Phytopharmacy & Department of Pharmacy Practice of JSS College of Pharmacy, Ooty in association with Indian Pharmaceutical Association, The Nilgiris Local Branch and 'For the People' an NGO jointly organized the camp. Dr Arun KP, Vice-Principal, Dr Shanmugam R, TIFAC Coordinator, Dr S Ponnusankar, Professor and Head, Department of Pharmacy practice, Dr Lalitha Priyanka, HOD i/c, Department of Pharmacognosy and Phytopharmacy, Dr M Deepalakshmi, Assistant Professor, Department of Pharmacy Practice, the faculty members Dr Srikanth J, Dr Rajamohamed along with the supporting staff Mr Venkatesh, Mr Siddhuraju and Mr Arul Gandhi and the PG students. PhD Scholars, PharmD interns coordinated the entire event smoothly.

During the valedictory function Dr Arun KP, Vice-Principal honored the Doctors, Lab Technician, the Panchayat President, Secretary & the Councillor with shawl and thanked everyone for their voluntary service for the success of the medical camp.

IMPORTANT DATES TO REMEMBER!

For clarifications/ feedback, write to:

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