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Pharma Beacon - Vpcw Edition

VIVEKANANDHA EDUCATIONAL INSTITUTIONS FOR WOMEN * 1992 * WOMEN EMPOWERMENT

VIVEKANANDHA PHARMACY COLLEGE FOR WOMEN

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"Vidhya Rathna"

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Dear Readers,

Welcome to the inaugural edition of Pharma Beacon - VPCW Edition, the official newsletter of Vivekanandha Pharmacy College for Women (VPCW). This platform celebrates knowledge, innovation and success within our institution.

At VPCW, we are dedicated to nurturing young minds and empowering them to excel in the pharmaceutical sciences.Through Pharma Beacon - VPCW Edition, we bridge the gap between faculty, students, alumni and the industry, fostering collaboration and continuous learning. Explore remarkable research, scientific breakthroughs and student and faculty achievements. Engage with interviews, thought-provoking articles, and event updates.

We extend our appreciation to the editorial team, faculty, and students for their dedication in bringing this newsletter to life. Their commitment to excellence and passion for knowledge dissemination shine through every page of Pharma Beacon - VPCW Edition.Share your insights, experiences, and contribute to a vibrant forum.

Pharma Beacon - VPCW Edition is a catalyst for intellectual growth, fostering unity and pride among the VPCW community. I invite you to immerse yourself in its pages, embrace new ideas, and stay updated with the latest advancements in pharmaceutical sciences.

Join us in propelling the pharmacy profession forward, making a lasting impact on healthcare and society.Embrace new ideas, stay updated, and let this newsletter inspire and connect us all.

HALOPERIDOLINDUCED ACUTE DYSTONIA

INTRODUCTION : Acute dystonia induced by antipsychotic drugs is described as sustained abnormal postures or muscle spasms that develop within 7 days of starting or rapidly raising the dose of antipsychotic medication. It is mostly seen in younger age group with higher prevalence among males. This reactions are characterized by abrupt onset of involuntary movements that most commonly involve the face and neck, but can also involve the trunk and extremities.Most commonly, these "extrapyramidal" side effects occur after exposure to dopamine receptor blocking drugs, including antipsychotics, antiemetics etc.Younger patients seem to be more susceptible to develop acute dystonic reactions, while older patients are more likely to develop drug-induced Parkinsonism.The incidence of acute dystonia was twice as high in men as in women.High potency antipsychotic drugs such as haloperidol, fluphenazine, and pimozide cause dystonia more frequently than do low potency drugs such as chlorpromazine and thioridazine.

CASE REPORT : A 35 years old male patient visited psychiatric department with the complaints of reduced sleep and irrelevant talk for past 1 month. On examination, he was diagnosed as acute psychosis and prescribed with T. Haloperidol 5mg 1/2BD and T. Diazepam 5mg HS. On the next day, patient developed slight muscle spasm of face with increased salivation by evening. His head was tilted towards backward (cervical dystonia) with opened mouth (cranial dystonia) and abnormal eye movements. Oromandibulardystnonia often occurs in combination with cervical dystonia.

Then the patient received 50mg/2ml of inj. Promethazine im& the reaction(sialorrhea and oromandibular dystonia accompanied by retrocollis) was resolved within 15 minutes. The action taken with the suspected drug was the discontinuation of haloperidol tablet and added T. Trihexyphenidyl 2mg 1-1-0 & T. Quetiapine 25mg HS along with T. Diazepam 5mg HS. It was suspected that the adverse event was Probable/Likely related to the suspected drug (As per WHO Causality scale).

In the management of acute dystonia, a high level of clinical suspicion is crucial which should be extracted from the drug history. Balancing the disrupted dopaminergic-cholinergic balance in the basal ganglia by anticholinergic agents & discontinuation of the offending agent are cornerstones of management of dystonia.

CONCLUSION : The benefits of antipsychotic medications are sometimes obscured by their adverse effects. These effects range from relatively minor tolerability issues (e.g., mild sedation or dry mouth) to painful (e.g., acute dystonias) to disfiguring (e.g., weight gain, tardive dyskinesia) to life-threatening (e.g., myocarditis, agranulocytosis). The use of antipsychotic medications entails a difficult trade-off between the benefit of alleviating psychotic symptoms & the risk of adverse effects. Appropriate prevention & optimal management of ADR can enhance the benefits of antipsychotics & improve patients' quality of life. Adverse drug events are preventable most of the time. Patient awareness of ADR reporting is vital to improve safety and signal detection.

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   Ayd F. A Survey of Drug-Induced Extrapyramidal Reactions. JAMA. 1961 ; 175(12) : 1054.

By

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RETT SYNDROME AND ITS UPDATES

Rett syndrome is a rare, genetic, neurological disorder that affects mostly girls and leads to severe impairments, affecting nearly every aspect of the child's life. This condition affects an estimated 1 in 10,000 females child. Most children with Rett syndrome have a mutation on the X chromosome on a gene called methyl CpG binding protein 2 (MECP2) and the mechanism is not clear.The most well-known switches typically show up when children are somewhere in the range of 12 and 18 months, and they can be abrupt or progress gradually. The disorder was recognized by Dr. Andreas Rett, an Austrian doctor who previously depicted it in an article in 1966. It was not until following a second article about the syndrome, published in 1983 by Swedish analyst Dr. BengtHagberg, that the disorder was generally recognized.

Symptoms of Rett syndrome include slowed growth, wring or rub their hands together(hallmark sin), decline of social and language skill, walking awkward, scoliosis, microcephaly, bruxism, irritability, crying, cognitive disability, difficult feeding, uncoordinated breathing, seizure and sleep disturbances. Genetic testing(DNA analysis) confirm the diagnosis of Rett syndrome in 80% of the case. There is no cure for Rett syndrome but symptomatic treatment and supportive therapy are available to improve the symptoms in most case.

Researchers realize that absence of an appropriately working MeCP2 protein disturbs the function of mature brain cells but they do not know the exact mechanisms by which this happens. Agents are attempting to discover other hereditary switches that work along these lines to the MeCP2 protein. When they find how the protein functions and find comparative switches, they may devise treatments that can fill in for the malfunctioning switch. Gene therapy to accomplish regulated expression of an ordinary MECP2 gene is likewise under investigation in animal models.1

Anavex 2-73 (blarcamesine), an investigational treatment for Rett disorder, decreased the infection's trademark social highlights, its seriousness, and levels of the glutamate biomarker with no genuine results, top-line consequences of a Phase 2 clinical trial. The double-blind and placebo-controlled Phase 2 trial (NCT03758924) assessed the wellbeing, pharmacological profile, and adequacy of Anavex 2-73, given orally as a fluid, in 25 ladies with Rett syndrome. They were randomized to once-daily doses of either 5 mg Anavex 2-73 or a placebo for seven weeks.

Results showed that 66.7% of treated patients had statistically significant decreases in the infection's characteristic behavioral features, which can incorporate hand stereotypies, hyperventilation, and breath holding, as surveyed by the guardian revealed Rett Syndrome Behavior Questionnaire (RSBQ), compared with 10% of those on a placebo. RSBQ score improvements compared with lower blood levels of glutamate, a marker of Rett advancement, a neurotransmitter that attempts to enact nerve cells.

Moreover, treated patients showed a statistically significant facilitating in illness seriousness, as estimated by the Clinical Global Impression Improvement Scale (CGI-I) that clinicians use to survey changes over time. Information found that 86.7% of patients utilizing Anavex 2-73 encountered a supported improvement, as did 40% of those given placebo. The result of this trial is exceptionally encouraging regarding both wellbeing and clinical improvement. In spite the challenges of the older age of the cohort (patients were more than 18 years old) and the generally low dose (5 mg day by day), ANAVEX 2-73 showed clinically significant enhancements in result measures assessing different impairments.[2]

Overall, while there is no cure for Rett syndrome, there are several treatment options available that can help manage symptoms and improve quality of life for those affected by the disorder. Ongoing research and clinical trials are helping to identify new and innovative treatments for this rare and complex disorder.

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MONTHLYDRUGSAFETYALERT

The preliminary analysis of Adverse Drug Reactions (ADRs) from the PvPI database February 20, 2023, revealed that the following suspected drugs are as sociated with the ADRs as given below.

S.No.	Suspected Drugs	Indications	Adverse Drug Reactions
1.	Cephalosporins	Cephalosporinsarebeta-lactamantimicrobialsusedtomanageawiderangeofinfectionsfromGram-positiveandGram-negative bacteria.	Purpura
2.	Amikacin	Indicatedin the treatment of serious infections due to amikac in	Vision blurred

Healthcare Professionals, Patients/Consumers are advised to closely monitor the possibilityof the above ADRs associated with the use of above suspected drugs. If, such reactionsareencountered, please report to the nearby ADR monitoring centre or send mail to our ADR Montoring Centre svcpvmchamc@gmail.com or NCC-PvPI, IPC by filling of Suspected Adverse Drug Reactions Reporting Form / Medicines Side Effect Reporting Form for Consumer (http://www.ipc.gov.in), through Android Mobile App "ADRPvPI" and PvPI Helpline No.1800-180-3024.

H3N2 GRIP

It is a respiratory illness get from the influenza virus. A highly contagious airborne disease with variable degrees of systemic symptoms, ranging from mild fatigue to respiratory failure and death.1957 flu pandemic, also called Asian flu pandemic of 1957 or Asian flu of 1957.Seasonal influenza like the H3N2 virus is an acute respiratory infection caused by influenza viruses that circulate in all parts of the world, and the cases are seen to increase during certain months globally. Every year, India witnesses two peaks of seasonal influenza: one from Jan to March and another in the post-monsoon season. The cases arising from seasonal influenza are expected to decline from March end.

India is witnessing a surge in H3N2 Influenza virus cases, with the number of cases going up to 451 till March 5, 2023 according to data shared by the health ministry. India's death toll due to the H3N2 virus climbed to nine on Friday after a 73-year-old man died in Pune's Pimpri-Chinchwad after contracting the H3N2 influenza virus. H3N2 is a sub-type of Influenza A. Highly contagious and spreads through droplets released by an infected person when coughing, sneezing, or talking. The incubation period ranges from 1 to 4 days. Rapid antigen or conventional reverse transcriptase-polymerase chain (RT-PCR) test and pulse oximetry and chest x-ray for patients with severe respiratory symptoms used as diagnostics.

Oseltamivir phosphate (Tamiflu) Oseltamivir by mouth as a pill or a liquid. Zanamivir (Relenza) Available as inhaler.Antiviral drugs given early can slightly decrease duration and severity of symptoms but are typically used only in high-risk patients ; different influenza types and subtypes are resistant to different drugs. Vaccinate annually everyone aged ≥ 6 months who does not have a contraindication; antiviral drugs can be used for prevention in immunocompromised patients (who may not respond to vaccination) and patients with contraindications to vaccination.

Other remedies like getting plenty of rest, drinking fluids like water or broth to help prevent dehydration.Applying heat packs or hot water bottles can help with aching muscles. Taking acetaminophen (Tylenol) or NSAIDs (Advil, Motrin, Aleve) can help lower your fever and relieve head and body aches. Using spray or oral decongestants like phenylephrine or pseudoephedrine can help with a runny or stuffy nose. Taking cough suppressants (antitussives) like dextromethorphan can help calm a nagging cough. Using expectorants like guaifenesin make it easier to clear mucus out of your lungs.

Close contact with infected people or contaminated materials should be avoided. Contact with sick or dead animals should be avoided. Promote and administer seasonal influenza vaccine. Wear gloves for any contact with potentially infectious material. Remove gloves after contact, followed by hand hygiene. Performed by washing with soap and water or using alcohol-based hand rubs.

Following proper health care measures, priorly seasonal flu vaccinations and consuming nutritional supplements like (Fermented foods, Vit D rich food, Legumes, Turmeric, Sea foods and Garlic) boost up the immunity can avoid complications and mortality rate.

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1. Brinda LD. Influenza. MSD Manuals. Available from https://www.msdmanuals.com/en-in/professional/infectious diseases/respiratory-viruses/influenza. Updated on Sep 2022. Assessed on 23 March, 2023.
2. Hayden FG, Sugaya N, Hirotsu N, et al. Baloxavirmarboxil for uncomplicated influenza in adults and adolescents. N Engl J Med.2018; 379:913-923.

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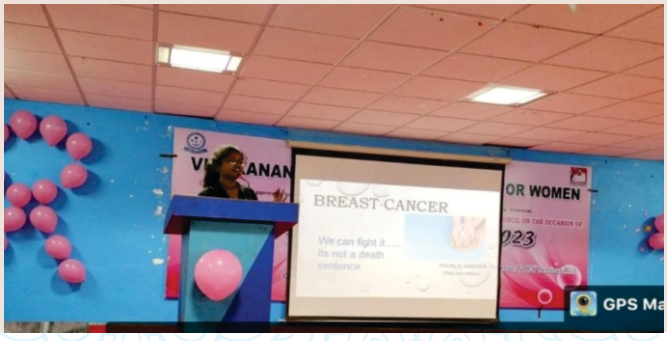
STUDENT OUTREACH ACTIVITIES

VPCW celebrated Pongalon 12th Jan 2023 at Vivekanandha Educational Institutions Sankari Multipurpose Campus ground.

Voter's day pledge have taken by VPCW on the occasion of 13th National Voter's day on 25th Jan 2023



VPCW celebrated 74th Republic day with Vivekanandha Educational Institutions on 26th Jan 2023.

Final years B.Pharm & D.Pharm participated in Guest Lecture programme on "Prevailing Oppurtunity for Pharmacist in their Career" on 31st Jan 2023 at VPCW Seminar Hall.

Final year B.Pharm students conducted an Awareness Programme about Cancer for World Cancer Day on 6th Feb 2023 at VPCW Seminar Hall.

Final year B.Pharm students went for Industrial visit to SKM Siddha & Ayurvedic, Erode on 9th Feb 2023.

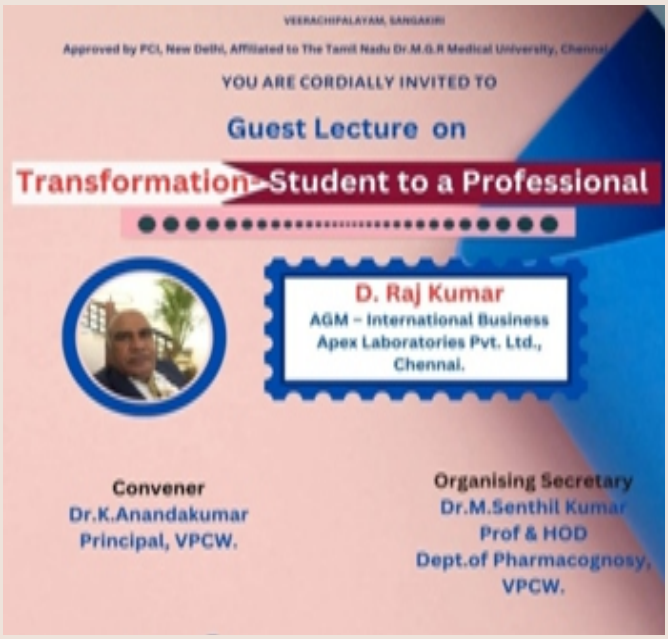
B.Pharm students participated in Skill development programme on 11th Feb. 2023 at VPCW Seminar Hall.

Second year B.Pharm students went Two days Tour to keralaon 24th & 25th Feb 2023.

VPCW celebrated International Women's day with Vivekanandha Educational Institutions on 8th Mar 2023.

IIB.Pharm students attended one day National level CEP programme on "Drug Discovery, Design & Development : Current Scenario and Future Perspective" at The Erode college of Pharmacy at Erode on 9th Mar 2023.

Final years B.Pharm&D.Pharm participated in Guest Lecture programme on "Transformation - Student to a Professional" on 10th Mar 2023 at VPCW Seminar Hall.



Final year B.Pharm students attended the Campus Interview conducted by Kovai Medical centre and Hospital, Coimbatore at our Campus on 23rd Mar 2023. 13 students were selected among the 18 students who attended the Interview for the post of Hospital Pharmacist.

VIVEKANANDHA EDUCATIONAL INSTITUTIONS

"Vidhya Rathna"

Prof. Dr. M. KARUNANITHI, B.Pharm., M.S., Ph.D., D.Litt.,

Chairman & Secretary

TIRUCHENGODE CAMPUS

- ★ SWAMY VIVEKANANDHA MEDICAL COLLEGE HOSPITAL AND RESEARCH INSTITUTE
- ★ VIVEKANANDHA DENTAL COLLEGE FOR WOMEN
- ★ SWAMY VIVEKANANDHA COLLEGE OF PHARMACY
- ★ VIVEKANANDHA COLLEGE OF NURSING
- ★ VIVEKANANDHA SCHOOL OF ANM
- ★ SWAMY VIVEKANANDHA PHYSIOTHERAPY COLLEGE
- ★ VIVEKANANDHA ALLIED HEALTH SCIENCE COLLEGE (Co-Ed)
- ★ KRISHNA INSTITUTE OF OPTOMETRY AND RESEARCH
- ★ VIVEKANANDHA INSTITUTE OF HEALTH SCIENCE & RESEARCH (Boys)
- ★ KRISHNA INSTITUTE OF HEALTH SCIENCE (Boys)
- ★ VIVEKANANDHA COLLEGE OF ENGINEERING FOR WOMEN (AUTONOMOUS)
- ★ VIVEKANANDHA COLLEGE OF TECHNOLOGY FOR WOMEN
- ★ VIVEKANANDHA INSTITUTE OF INFORMATION AND MANAGEMENT STUDIES
- ★ VIVEKANANDHA COLLEGE OF ARTS AND SCIENCES FOR WOMEN (AUTONOMOUS)
- ★ VIVEKANANDHA COLLEGE FOR WOMEN
- ★ VIVEKANANDHA COLLEGE OF EDUCATION FOR WOMEN
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- ★ KRISHNASHREE COLLEGE OF EDUCATION FOR WOMEN
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- ★ M.K.G. FOODS AND FEEDS
- ★ M.K.G. ENTERPRISES

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