NATIONAL PHARMACY WEEK CELEBRATIONS-2015

PHARMA EXPO-2015 (27th & 28th Nov, 2015) PHARMA RALLY-2015 (26th-Nov,2015)

BLOCKING BRAIN INFLAMMATION COULD TREAT "ALZHEIMER'S"

Blocking a receptor in the brain responsible for regulating immune cells could protect against the memory and behavior changes seen in the progression of Alzheimer's disease, says a new study. The study points out that inflammation in the brain can drive the development of the disease and suggests that by reducing this inflammation, the growth of the disease can be curtailed."These findings are as close to evidence as we can get to show that this particular pathway is active in the development of Alzheimer's disease," said lead author of the study Diego Gomez-Nicola from University of Southampton in Britain. The researchers used tissue samples from healthy brains and those with Alzheimer's, both of the same age. They counted the numbers of a particular type of immune cell, known as microglia, in the samples and found that these were more numerous in the brains with Alzheimer's disease. In addition, the activity of the molecules regulating the numbers of microglia correlated with the severity of the disease. The researchers then studied these same immune cells in mice that had been bred to develop features of Alzheimer's. They found that an inhibitor that blocks CSF1R, the receptor responsible for regulating microglia could prevent the rise in microglia numbers seen in untreated mice as the disease progressed. The inhibitor also prevented the loss of communication points between the nerve cells in the brain associated with Alzheimer's, and the treated mice demonstrated fewer memory and behavioral problems compared with the untreated mice.

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CLINICAL PHARMACY

PROMOTES HEALTH BY PROVIDING PHARMACEUTICAL PATIENT CARE

News Letter

NIRMALA COLLEGE OF PHARMACY

ASSESSSING RISK IN OVER THE COUNTER DRUG USE

Hundreds of products are available to consumers on pharmacy shelves; dozens are often available for just one indication. Choosing the most appropriate agent from this maze of product can be daunting task & a greater challenge to keep risk at minimum. Therefore understandable if health care professionals are not completely comfortable with product selection and use. Such concern has lead to calls for

"**A third category of pharmacist only agents".** OTC drug users may have inadequate knowledge of possible adverse effects of drug. Consumers generally do not consider the risk of OTC drugs use, preferring instead to focus on the benefits. Studies found that 18% of all drugs related hospitalizations during a 3Yr period resulted from adverse reactions of OTC drugs. In Germany between 0.1% & 16.8% of all hospital admissions were caused by adverse drug reactions in a 1Yr study from 1993-1994. The concerns raised by this broad-based data and by extent of OTC drug use specific areas are of concern have materialized. Three of these areas are analgesics, pediatrics & geriatrics.

ANALGESICS: Use of analgesics has been classified as extremely high among adults; an estimated 147 million adults use them monthly. One report found that 30% of adults used numerous analgesics during 1 month period. In another acetaminophen was reportedly used 1 or more days per week by more than 20% of American women and 42% reported similar use of OTC NSAIDs 1or more days per week. Total 9062 respondents were carried out regarding OTC NSAID use. Many exclusive OTC drug users were neither aware of (60%) nor believed they were at risk of (29%) adverse reaction from NSAIDs.

PEDIATRICS: Given such a vulnerable group, any drug use in infants and small children is of concern. A study found that in 1991the prevalence of OTC drug use among 3-year old American children. Most of the 8145 respondents reported recent childhood illness treated with such drugs. During a 1 month period, 53.7% of all the children were given some of OTC drugs. The most common drugs were acetaminophen & cough/cold agents. In United Kingdom all requests and sales of OTC drug for children, as well as consultations for minor ailments, in 12 community pharmacies. For 976 encounters, a total of 1333 symptoms were noted. Commonly purchased drugs were analgesics & antipyretics, followed by cough and cold, head lice and allergy products. Total of 568 drug requests, 5 were for aspirin (4-for children 8-14 yrs and 1 for a 2 yr old with fever) which indicates that, despite educational campaigns, some patients still use aspirin in children. The study enrolled that 200 children aged 10 yrs &b under who had been given a known dose of an antipyretics. Of these 51% received an inaccurate dose of drug; this include 62% of those receiving acetaminophen & 26% of these receiving ibuprofen. In a Canadian study, parental administration of acetaminophen was assessed for children with a chief complaint of fever. The mean length of fever at the time of presentation was 4.1 days. The average dose of acetaminophen was 12 mg/kg (SD=8.3). Of those studied, 100 parents gave the recommended dose of acetaminophen, 26 parents gave an overdose, & 87 gave less than recommended dose.

GERIATRICS: Regarding just one therapeutic area, concern has existed for years about the use of laxatives in the elderly. A nationwide telephone interview of 10,018 adults of all ages found the overall prevalence of constipation to be 14.7% with 1.8% reporting laxative use at least every other day. Constipation is a common condition in the elderly, and OTC drug use reflects this. In a group of 4136 community-dwelling elderly, 10.2% reported using one or more products, with stimulants and bulk-forming agents the most commonly used, and 11.6% reported concurrent use of two or more laxatives. When data were collected from 7324 people who purchased OTC laxative products in Italy, it was found that only 59.8% used the agents correctly. A physician or a pharmacist influenced the choice in37.7% and 20.5% of cases, respectively.

Reference: Health Promotion & Maintenance (ACCP)
Book no: 8, Edition no: 6 Page no: 135

BY. P. Bhavana ,III Pharm.D

NICOTINE USE DISORDERS & THERAPY:

A substantial number of patients served daily by pharmacists in community, hospital, and other healthcare facilities are also abusing or dependent on alcohol, other drugs or a combination, resulting in a variety of *SUBSTANCE USE DISORDERS (SUD'S)*. Substance dependence has been defined medically as a group of behavioural and physiological symptoms that indicate the continual, compulsive use of drugs in self- administered doses despite the problems related to the use of drug.

Pharmacotherapy of Nicotine use disorders is as follows: **FDA Approved**:- 1) Nicotine gum 2 mg and 4 mg. used every 1-2 days, do not exceed 24 pieces/day, do not drink or eat for 15 min before or after using gum or lozenges, can be used up to 12 weeks. 2) Nicotine lozenges 2 mg and 4 mg do not exceed 20 pieces/day, suck on the lozenge until it is completely dissolved, do not swallow. 3) Nicotine patches 7, 14 and 21mg apply each new patch to a different area to prevent skin irritation, can apply multiple patches.4)Bupropion SR 150mg…use twice a day at least 8hours apart, can be used up to 6 months. 5)Varenicline 0.5 and 1mg use 12-24 weeks, start 1 week before quit date. These products come under

Nicotine Replacement Therapies: **Not FDA Approved**:- Nortriptyline 10, 25, 50 and 75 mg doses start at 25 mg/day and gradually increase to 75-100 mg/day for 12 weeks. Clonidine 0.1, 0.2, 0.3 mg can use in combination with other products. The primary goal of treatment is termination, an abstinence period of 6 months or longer is an acceptable marker for successful cessation as relapse rates after 6 months or low.

REFERENCE:ACCP Journal, PSAP 6th edition(Book-3),

BY: K. Prasanna, P. Bhavya (III/VI PHARM D)

UPCOMING EVENTS:

- **ANNUAL DAY CELEBRATIONS ON 27TH FEBRAUARY 2016.**
- **ALUMNI MEET 27TH FEBRAUARY 2016.**

Campus Placement Drive:

For Diploma in Pharmacy students college has organized a drive in association with Med Plus Pharmacy on 09-01-2016. In this drive 22 students got short listed for the jobs.

GPAT-2016 QUALIFIED STUDENTS OF NIRMALA COLLEGE OF PHARMACY

G.S.V.N.D SAI KUMAR

Hall ticket No :1101136731

All India Rank: 78

N.SAI TEJA

Hall ticket no : 1100136479

All India Rank: 764

K.CHAITANYA LAKSHMI

Hall ticket no : 1101136879

All India Rank: 1963

P.CHANDRA KIRAN

Hall ticket no: 101136509

All India Rank: 1963

D.DEEPTHI

Hall ticket no : 1101136611

All India Rank: 2384

K.AJAY SUSHANTH

Hall ticket no: 1101136809

All India Rank: 3369

VIAGRA CAN HELP PEOPLE WARD OFF DIABETES RISK

The erectile dysfunction drug sildenafil, sold as Viagra and other brand names, inhibits an enzyme resulting in relaxation of smooth muscle and increased blood flow. Sildenafil is used to treat erectile dysfunction and pulmonary arterial hypertension. In animal studies, researchers from Vanderbilt University Medical Centre in the US have found that sildenafil also can improve insulin sensitivity, the uptake of glucose from the bloodstream by muscle. This action can lower the level of circulating glucose, and potentially reduce the risk of diabetes. While further studies are needed to determine whether long-term treatment can prevent the onset of diabetes in high-risk patients, "sildenafil and related drugs could offer a potential avenue for addressing the rising number of diabetes diagnoses", said Nancy J. Brown, chair of the department of medicine at Vanderbilt. For the study, overweight individuals with prediabetes were randomly assigned to receive sildenafil or placebo (inactive drug) for three months. Of the 42 participants, those treated with sildenafil were significantly more sensitive to insulin, the researchers reported in the Journal of Clinical Endocrinology and Metabolism. Sildenafil and related drugs prevent the specific enzyme from breaking down a chemical in the body called "cyclic GMP" which relaxes blood vessels and increases insulin sensitivity.

By: SHAIK MUNWAR, Assistant Professor