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Contents

Editorial

- Prof. Saeed Ahmed Khan

2

News & Events

White Coat CEREMONY

- What's Up Freshers

Faculty Articles

ADHERENCE TO SURGICAL SITE INFECTION GUIDELINES IN CARDIAC SURGERY IN A TERTIARY HOSPITAL IN Dubai, UAE Abstract by Dr.Eman Abu Gharbieh

- DEVELOPMENT AND CLINICAL EVALUATION OF CLOTRIMAZOLE-B-CYCLODEXTRIN EYE DROPS FOR THE TREATMENT OF FUNGAL KERATITIS Research article by Dr. Bazigha K. Abdul Rasool,

6

Students Contribution

-Reflections (Essay) by Hira Amjad -Life- As we Like it (Poem) by Afnan Al Zamrooni 10

Artistic Expressions

By Nour Mustafa Asfari

11

Letter to the Editors

- About DPC Newsletter

12

Editorial



We are happy to release the 12th issue of the DPC newsletter. For all, the future holds many promises.

Wish you all a successful academic year 2012-2013.

Prof. Saeed Ahmed Khan, Dean, Dubai Pharmacy College







White Coal Ceremony

A 'White Coat Ceremony' was held on Sunday, Sept 9th, to welcome new batch of students of Dubai Medical College (DMC) and Dubai Pharmacy College (DPC), the first medical and pharmacy colleges in the UAE.

The White Coat Ceremony is a tradition within the medical profession that marks the students' transition from the classroom to clinical studies. New students of 27th batch from DMC and 21st batch from DPC will take Hippocratic Oath on the day, in the presence of the Deans, faculty members, fellow students and family to mark this rite of passage.

The event program includes key-note address by Haj Saeed Bin Ahmed Al Lootah, Founder and Chairman of the Board of Trustees, DMC; welcome addresses by Prof. Mohammed Galal El Din Ahmed, Dean of DMC and Prof. Saeed Ahmed Khan, Dean of DPC.

Over 1600 professionals have graduated till date from DMC and DPC out of which around 500 are Emiratis.



What's Up Freshers!

Thoughts our freshers (first year students) shared after their very first week at

the College!

"DPC is a decent place and the faculty really friendly and teach very well"

- Aisha

"We are all getting to know each other and the doctors are considerate and make sure every student can grasp the lecture.

Imaan

"I'm in my comfort zone here and with an amazing roommate in the hostel, I'm off to a great start!"

Arooj

"The environment of the college is pretty happy, friendly and cozy"

Noussiba

By Arwa Nousheen (3rd year)



Adherence to Surgical Site Infection Guidelines in Cardiac Surgery in a Tertiary Hospital in Dubai, United Arab Emirate

ABSTRACT



Purpose: To assess the appropriateness and compliance of antibiotic prophylaxis practices in cardiac surgery within a tertiary hospital in UAE using the aforementioned three international guidelines: NSIPP, STS, and ACC/AHA guidelines. *Methods:* A retrospective study have been performed by reviewing patients files admitted for surgical cardiology procedures in a hospital in UAE during the period of January 2008 and February 2010, the study evaluated the adherence of health care professionals to the aforementioned three international guidelines; antibiotic National Surgical Infection Prevention Project (NSIPP), the Society of Thoracic Surgeons (STS) and the American College of Cardiology/American Heart Association (ACC/AHA) with regard to antimicrobial prophylaxis. Results: A total of 92 patients were included in the study. According to the international guidelines, only 89.1 and 79.3% of the patients received the recommended pre- and post-operative antibiotic respectively. On the other hand, 93.5% of the patients had received the right antibiotic dose while the total duration of all antimicrobial agents used for prophylaxis was concordant with the guidelines (48 hours) in only 67.4% of the patients Conclusion: Adherence to the International antimicrobial prophylaxis guidelines for cardiac surgery was found to be suboptimal in the anticipated hospital in Dubai. The results highlight the challenges faced to apply evidence based protocol into clinical practice.

This research has been published in *Tropical Journal of Pharmaceutical Research*, 2012; 11 (4): 657-664.

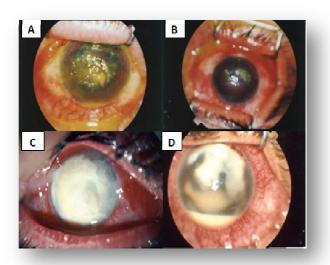


Fig.1. Slit lamp photographs of two fungal keratitis patients were effective to the treatment of the prepared CTZ ophthalmic solution. A and C: before treatment. B and D: 14 days after treatment.

DEVELOPMENT AND CLINICAL EVALUATION OF CLOTRIMAZOLE-β-CYCLODEXTRIN EYE DROPS FOR THE TREATMENT OF FUNGAL KERATITIS

Research article by Dr. Bazigha K.
Abdul Rasool, Associate Prof. in
Department of Pharmaceutics and
Pharmacy Practice,
Dubai Pharmacy College

Published in: American Association of Pharmaceutical Scientists Pharm Sci Tech, Vol. 13, No. 3, September 2012; DOI: 10.1208/s12249-012-9813-4.

Summary

According to the World Health Organization, corneal diseases are a major cause of vision loss and blindness, second only to cataract in overall importance. Fungal keratitis is one of these serious corneal diseases, especially in developing agricultural countries. Worldwide, the incidence of fungal keratitis is sporadic; however in developing countries there is an increase in incidence with the abuse of antibiotics, corticosteroids and immunosuppressive agents. The incidence of fungal keratitis varies according to the geographical location, for example, 2% in the USA, 33% - 40% in Bangladesh, 44% in South India, 17% in Nepal, 49% in Ghana and 18.7% in Iraq.

It was reported that polyene antifungal antibiotics, the first-line therapy in fungal keratitis, are not effective in severe keratomycosis, while imidazole derivatives may be the better choice in the future. However, most of these antifungal drugs are still unavailable as commercial eye drops since they must be prepared in the hospitals' pharmacies as ophthalmic solutions of limited stability and poor storage conditions. The management of fungal keratitis represents a problem to the ophthalmologist, mainly due to the unavailability of antifungal eye drops. Freshly prepared topical amphotericin-B (0.1-0.5%) was used with a good response. This extemporaneous



ophthalmic solution is usually prepared from an amphotericin B injection (Fungizone®). Fungizone contains deoxycholate necessary to solubilize the highly hydrophobic amphotericin B which renders their instillation painful and leads to poor compliance and an aggravation of symptoms. In addition to its high cost, there is poor corneal penetration and instability in their aqueous solution.

On the other hand clotrimazole (CTZ), a synthetic imidazole derivative, is a broad-spectrum antifungal agent that exhibits fugistatic and fungicidal activity. CTZ dermatological commercial preparation was used in a diluted form to treat human keratomycosis successfully and in combination with a polyene derivative was required for the treatment of fungal corneal infection due to Fusarium spp. However, these non aqueous topical preparations are an eye irritant. Besides patients with ocular infections require several months of treatment, thus the product's safety, stability and practical restrictions during preparation in the hospital pharmacies have to be taken into account. Since CTZ is a hydrophobic drug, solubility is the main constraint for its bioavailability. Recently cyclodextrins (CDs) were utilized to prepare water-soluble complexes with lipophilic drugs such as steroids and some carbonic anhydrase inhibitors, in the form of eye drops. Cyclodextrins increased water solubility of lipophilic drugs and consequently enhanced their ocular absorption and stability and reduced their local irritation.

Therefore we have prepared a CTZ β -CD aqueous ophthalmic solution as an attempt to increase the CTZ solubility and consequently its penetration through the ocular epithelium. This preparation was pharmaceutically and microbiologically evaluated, and then clinically assessed on fungal keratitis compared with extemporaneous amphotericin B eye drops (0.5% w/v). The clinical study was conducted in Ibn Al-Haetham Teaching Eye Hospital, Baghdad, Iraq.

Our results showed that, the prepared formula was stable in 0.05M of phosphate buffer pH 7.0 at 40 ± 2 °C and $75\pm5\%$ RH for a period of 6 months. Light has no significant effect on the formula's stability. The CTZ- β -CD eye drops efficiently complied with the isotonicity, sterility and anti-microbiological preservative effectiveness tests. Results of the clinical study revealed that, 20 (80%) patients showed a favorable response to the CTZ- β -CD eye drops, while 16 patients (64%) patients exhibited a favorable response to amphotericin B (P>0.05). The mean course of treatment was significantly (P<0.05) less in the CTZ treatment group than in the amphotericin group (21.5 \pm 5.2) versus (28.3 \pm 6.4) days, respectively. The CTZ



formulation was significantly (P<0.05) more effective in the management of severe cases also against *Candida sp* than amphotericin B. There was no significant difference (P<0.05) between both therapies against filamentous fungi. As a conclusion, the CTZ- β -CD formulation can be used alternatively to other ophthalmic antimycotic treatment options in developing countries where stability, cost or efficacy is a limiting factor.



Congratulations!

Ms. Amina Muhammad Zarar,

Institutional Effectiveness & Publication Unit (Secretary)

For successfully completing B.Sc. in Management Degree Wish her all the very best @>-->--/





Reflections

As I watched the patients surprised and hurt face that was the turning point of my life. From the first day of my college I was taught that patience and kindness were the top notch qualities of not only a pharmacist but any human. But sometimes we tend to learn a few important things in our life through either our own or others mistakes.

Nourma*, the head pharmacist and my supervisor in the pharmacy, was going through a rough patch in her life. That day when a particular patient asked Nourma if she could demonstrate how to use the inhaler, Nourma answered harshly, telling the patient to read the instruction manual. This incident, which may have lasted for less than a minute, has had a huge impact and taught me a great lesson.

First and foremost we all need to understand that to bring any change in ourselves; a strong determined mind and helpful people around are the two most essential keys. Next comes the attitude. Not only when at work, all times we should display excellent conduct, as a human and chiefly as a pharmacist. A harsh, callous, ruthless and insensitive person only receives the wrath of others. Patient, kind and principally polite people are loved, adored and looked up to as role models.

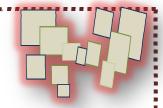
Importantly, pharmacist is not merely a person who dispenses medications to the sick. This work can easily and efficiently be performed by a machine. A human needs the support of another human to lean upon. The main job of specifically a community pharmacist is to provide high quality assistance to the patient and for this to be carried out an impressive display of manners is the first lesson any individual should learn.

Hira Amjad (batch 19)

* Fictitious name



LIFE... as WE like IT



The longer I live, the more I realize the impact of attitude on life. Attitude, to me, is more important than facts.

It is more important than the past,

the education,

the money,

than circumstances,

than failure,

than successes,

than what other people think or say or do.

It is more important than appearance, giftedness or skill.

It will make or break a company... a home.

The remarkable thing is we have a choice everyday regarding the attitude we will embrace for that day.

We cannot change our past...

we cannot change the fact that people will act in a certain way.

We cannot change the inevitable.

The only thing we can do is play on the one string we have, and that is our attitude.

I am convinced that life is 10% what happens to me and 90% of how I react to it.

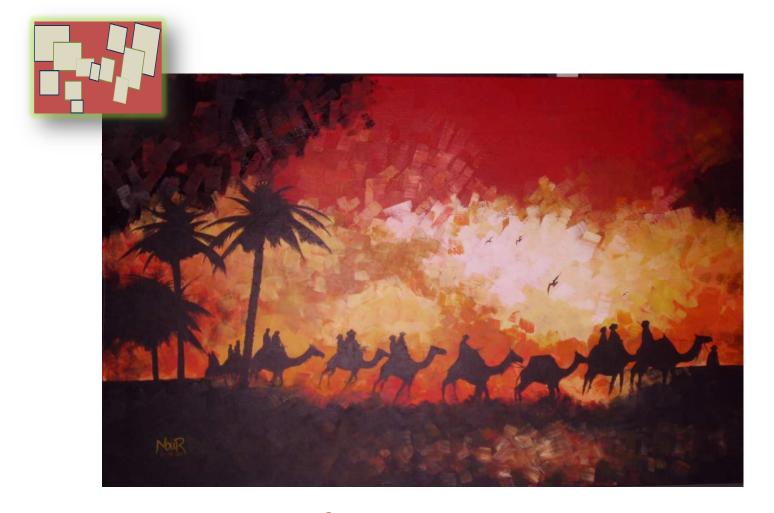
And so it is with you... we are in charge of our ATTITUDES!

AFNAN ALZAMROONI

(Batch20)

lave a suggestion or comment? Post it to < <pre>DPCnewsletter@dpc.edu>.

...Artistic Expressions



Nour Mustafa Asfari (Batch 21: First year)



...about DPC news letter

It is a great pleasure to know DPC news after graduation
I suggest more photos will add more charm.

Alaa A.

DPC graduate

That's a great amazing work which really deserves congrats.

It indicates how wonderful team work is.

Best of wishes and all the success.

Prof. FathiyaChief Academic Officer-DMCG

Asalam o alaikum DPC Newsletter team,

Thank you very much for the copy of the newsletter. I must say Masha'Allah a lot of hard work has been put together. Keep up the good work. The newsletter is amazing!

Omaima Mukarram

DPC Graduate

It is great to see how much things have progressed with the newsletter! Keep going with the fantastic work.

Sara Kamal

DPC Graduate

Dear DPC team,
Really wonderful!
Congratulations on putting
together an interesting
newsletter.

Dr. Fouzia

Director, Institutional Effectiveness DMCG

Dear DPC newsletter team, Great job! Congrats to everyone responsible for the letter.

Best regards,
Dr. Sara Hamza-DMC

