

PHARMACY BULLETIN

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NEW SAFETY INFORMATION ON STATINS

BY DANIEL UNG

Food and Drug Administration (FDA) has important new safety information on these cholesterol lowering medications. FDA is advising consumers and health care professionals that:

- **Routine monitoring of liver enzymes in the blood is no longer needed.**

Such monitoring has not been found to be effective in predicting or preventing the rare occurrences of serious liver injury associated with statin use. So FDA is now recommending that liver enzyme tests be performed before statin treatment begins and then as needed if there are symptom that include unusual fatigue, loss of appetite, right upper abdominal discomfort, dark urine or yellowing of the skin or whites of the eyes.

- **Cognitive (brain-related) impairment, such as memory loss, forgetfulness and confusion, has been reported by some statin users.**

The reports about cognitive impairment span all statin products and all age groups. In general, the symptoms were not serious and were reversible within a few weeks after the patient stopped using the statin. Patient is advised not to discontinue the statin abruptly but talk to health professional if they fear of the side effect.

- **People being treated with statins may have an increased risk of raised blood sugar levels and the development of Type 2 diabetes.**

Clearly the heart benefit of statins outweighs this small increased risk," says Egan. But what this means for patients taking statins and the health care professionals prescribing them is that blood-sugar levels may need to be assessed after instituting statin therapy.

- **Some medications interact with lovastatin (brand names include Mevacor) and can increase the risk of muscle damage.**

FDA is revising the drug label for Lovastatin to clarify the risk of myopathy. The label will reflect what drugs should not be taken at the same time, and the maximum lovastatin dose if it is not possible to avoid use of those other drugs.

The statins affected include: rosuvastatin, fluvastatin, atorvastatin, pitavastatin, lovastatin, pravastatin and simvastatin.

Reference: <http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm293330.htm>



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ANTIBIOTIC USE BRINGS MORE SIDE EFFECTS THAN WE THOUGHT

BY LIM HONG THAI

Most people know that common side effects of taking antibiotic includes the disruption of gut bacteria microflora. However, the story doesn't end there. It turns out the damage is far worse than what we thought.

Findings from Andrey Morgun of Oregon State University, show that antibiotic, when overused, can bring forth wide range of problems affecting our immune system, glucose metabolism, digestion system, and possibly, obesity¹. This is because not only it kills gut bacteria, it also destroys intestinal epithelial cells, disrupts mitochondria and host-microbe signaling.

Intestinal epithelial cells are specialized in absorb water, glucose and essential nutrients into the bloodstream. They also house a vast amount of immune cells and gut bacteria that are constantly interacting with each other to achieve harmony between host body and bacterial colonies. If this barrier is destroyed, digestion and immune system will compromised. This leads to diarrhea, ulcerative colitis, allergies etc.

Mitochondria are energy source inside cells. They convert nutrients into energy for cells to use such as grow, function and transmit signals to each other. Unfortunately, evolution theory said they were evolved from bacteria due to their structural resemblance. This explains why antibiotic attacks mitochondria too. As a result, host cell were killed and functionality lost.

Weight gain effect is explained clearly in Dr Laura's paper from Langone Medical Center. She claims that antibiotic kills important gut bacteria thus reprogrammed host metabolism and made them more prone to accumulation of body fat. Infants are affected most in particular because they need proper metabolism for growth. Bacteria affected that are important for microbial colonization in early life are *Lactobacillus*, *Allobaculum*, *Candidatus Arthromitus* and *Rikenellaceae sp*².

Relationship between child's allergies and antibiotic is not as conclusive as Dr Teresa of NHS Foundation Trust found. She concludes that antibiotic changes gut microflora and affects host maturing immune system in a way that promotes allergic disease development³. Furthermore, Lotta Nylund from University of Turku also support this findings as she discovered that kids with allergies condition (e.g. eczema) have more diverse set of gut bacteria than that of the kids who don't. In fact, they have more certain type of bacteria like Clostridum clusters IV, XIVa, that are usually found in adults' gut⁴. Such kids might have been exposed to antibiotic or processed food (e.g. fast food) treated with antibiotics at early age. Their early changes towards adult-type gut microflora is a risk factor to develop allergies condition⁵.

In conclusion, more studies suggest it is not good to ALWAYS treat infection with antibiotic due to various side effects and complications. Long term effects could have been avoided if parents and physicians were more aware of antibiotic use. It is better to introduce healthy gut bacteria into host after antibiotic treatment but more studies are needed.



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ADJUSTMENT OF DRUG REGIMEN DURING RAMADAN

BY STEPHANIE TIONG

Drug	During Ramadan
Biguanide i.e. Metformin T. Metformin 500 mg TDS	2/3 of total daily dose to be given during BUKA 1/3 during SAHUR (Max/dose = 1g) Metformin, 1g during BUKA, 500mg during SAHUR
Sulphonylureas (BD) i.e. Gliclazide, Glibenclamide T. Gliclazide 80mg BD	Switch the usual morning dose to BUKA Halve usual evening dose & give at SAHUR Gliclazide 40mg in the morning, gliclazide 80mg in the evening
Sulphonylureas (OD) i.e. Gliclazide MR T. Gliclazide MR 60mg OD	No change of dose needed Give at BUKA Gliclazide MR 60mg given before BUKA
Alpha-glucosidase inhibitors i.e. Acarbose T. Acarbose 50mg TDS	No change of dose needed Give with meals Acarbose 50mg during Sahur, 50mg during BUKA. Omit noon dose.
Dipeptidyl peptidase-4 inhibitors i.e. Sitagliptin, Vildagliptin, Saxagliptin, Linagliptin T. Sitagliptin 100mg OD	No change of dose needed Given at BUKA Sitagliptin 100mg given after BUKA
Basal insulin i.e. Insulatard, Insuman Basal, Insulin Glargine	No change needed. Usually given at bedtime
Pre-mixed insulin i.e. Mixtard, Insuman Comb 30 or twice a day insulin S/C Insuman Comb 30 --- 30 units OM & 20 units ON	Use the usual morning dose at BUKA Halve the usual evening dose at SAHUR S/C Insuman Comb 30 --- 10 units at SAHUR, 30 unit at BUKA
Basal bolus regime (4 injections in a day) Short/rapid acting insulin: i.e. Actrapid/Insuman Rapid/Novorapid Intermediate/long acting insulin: i.e. Insulatard/Insuman Basal/Glargine/Levemir	Inject one dose of short/rapid acting insulin at SAHUR Inject one dose of short/rapid acting insulin at BUKA Skip noon dose of short/rapid acting insulin Intermediate/long acting insulin given at bedtime For short/rapid acting insulin , whichever dose is higher is to be give at BUKA Reduce intermediate/long acting insulin dose for 20% if experience hypoglysema



Diabetes management in Ramadan



May the spirit of Ramadan
 stay in our hearts and
 illuminate our
 souls from within.
 easyday.snydle.com

Ramadan
 Mubarak

Leptospirosis

By PN KUAPIH FLORINA KIMJUN

Epidemiology

Leptospirosis is an infectious disease caused by *Leptospira interrogans*. Transmission can happen as a result of direct or indirect contact with infected animals or their secretions. The main source of infection are urine of infected or carrier animals, contaminated surface water, mud and soil. Research on leptospirosis has highlighted that rodents (20%), marsupials (35%) and bats (35%) are most likely to spread the disease.

Currently available data from the morbidity and mortality reports from MOH hospitals show the incidence of leptospirosis to have risen from 2 per 100 000 population in 2006 to 5 per 100 000 in 2009.

High risk groups

- Workers in the agricultural sectors
- Sewerage workers
- Livestock handlers
- Pet shops workers
- Military personnel
- Search and rescue workers in high risk environment
- Disaster relief workers (e.g. during floods)
- People involved with outdoor/recreational activities such as water recreational activities, jungle trekking, etc.
- People with chronic disease and open skin wounds.



Clinical features

Symptoms of leptospirosis can develop anywhere from 2 days to 4 weeks after being exposed to the bacteria. Common symptoms of leptospirosis include:

- Fever
- Chills
- Headache
- Muscle Aches
- Vomiting
- Diarrhea
- Abdominal Pain
- Jaundice
- Skin Rash
- Red Eyes



~Continue to Page 5~

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Treatment

Early treatment with antibiotics is essential.

		Suggested Treatment	
		Preferred	Alternative
Adults	Severe disease	IV Benzylpenicillin 2 million units q6h X 7 days	IV Ceftriaxone 2g q24hX 7 days
	Less severe disease	PO Doxycycline 100mg q12h x 7 days OR PO Azithromycin 500mg q24h x 7 days OR Ampicillin OR Amoxicillin	
Pediatrics		IV Benzylpenicillin 100,000U/ kg/ dose IV 6hourly x 7days	<u>>8yrs:</u> Doxycycline 4mg/kg/dose oral 12hourly x 7days <u><8yrs:</u> PO Ampicillin 75-100mg/kg/dose 6hourly x 7days OR PO Amoxicillin 50mg/kg/dose 6- 8hourly x 7days

LAWATAN KERJA PENGARAH KANAN PERKHIDMATAN FARMASI DAN PENGARAH AMALAN DAN PERKEMBANGAN FARMASI KE FASILITI KESIHATAN W.P.LABUAN PADA 06 - 07 April 2015



Sesi Dialog Warga Farmasi bersama Pengarah Kanan Perkhidmatan Farmasi, Dato' Eisah binti A. Rahman



Lawatan kerja Pengarah Amalan dan Perkembangan Farmasi, Puan Abida Haq Binti Syed M. Haq dan Timbalan Pengarah Cawangan Farmasi Klinikal & Teknikal, Puan Rosminah binti Mohd. Din ke Hospital Labuan

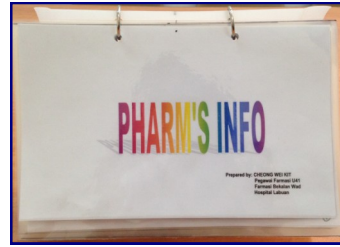


Pharmacy Staff Movement

New Staff:
Carrisa T'en Sing Ying
(Pegawai Farmasi U41)

Transferred:
Pn Izrul Azwa
(Pegawai Farmasi U48)

PHARM'S INFO



Pharm's Info is a tool designed to deliver key information about medicines to prescribers at Hospital Labuan especially for those new comers


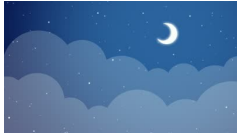



This tool can help to save time through the promotion of the use of generic names of drugs so that the prescribers convert the brand names to generic names easily

This tool also promote patient's safety
This tool can deliver important information concerning pharmacy in compact, fast and simple way, to the doctor.
Pharm's Info is easy to understand and easy to carry.

MANAGING COMMON ADVERSE EFFECTS ASSOCIATED WITH THE COMBINED ORAL CONTRACEPTIVE PILL

BY UNG YEW JYE



Problem	Management strategies based on practice
Nausea 	Reduce oestrogen dose Exclude pregnancy Take pills at night Change to progestogen-only method 
Breast tenderness 	Reduce oestrogen and/or progestogen dose Change progestogen Consider using a pill containing drospirenone
Bloating and fluid retention	Reduce oestrogen dose Change to progestogen with mild diuretic effect (i.e. drospirenone)
Headache 	Reduce oestrogen dose and/or change progestogen If headache occurs in hormone-free week, consider: <ul style="list-style-type: none"> • extended use or • giving oestradiol 50 microgram transdermal patch in this week or • try oestradiol valerate/dienogest pill¹⁸
Dysmenorrhoea	Extended pill regimen to reduce the frequency of bleeding
Decreased libido	No evidence supports a benefit of one type of oral contraceptive pill over another
Breakthrough bleeding 	If taking an ethinyloestradiol 20 microgram pill, increase oestrogen dose to a maximum of 35 microgram Change progestogen if already taking an ethinyloestradiol 30–35 microgram pill Try another form of contraception. Consider the vaginal ring.