UNIT KAJIAN DAN MAKLUMAT DRUG | JABATAN FARMASI | HOSPITAL USM

Drug newsletter

Vol.7, No.1,July 2015

Preface

For this edition of Drug Newsletter, our focus is mainly about resolution from Good Prescribing Practice (GPP) Workshop which was held last year.

Paving the way towards ... GOOD PRESCRIBING PRACTICE

The 2nd GPP Workshop was held on 11th - 12th December 2014 in Terengganu, jointly organized by Hospital Universiti Sains Malaysia and The School of Medical Sciences. Participants comprised mainly of prescribers (70%) whilst the remaining were from the allied health (nursing, medical assistants, pharmacy and IT personnel). The participants were presented with five relevant topics as a preamble to the workshop:

I. Tools & Resources In Prescribing
II. Current Prescribing Scenario In HUSM: Pharmacist's Perspectives
III. Current Prescribing Scenario In HUSM: Doctor's Perspectives
IV. Cost Implication of Drug Prescribing & Procurement SOP
V. Rational Prescribing

Much transpired during the program, with interactive Q&A between participants and presenters cum organizing committee all through the sessions. Despite unavoidable grievances, we could witness an environment of healthy transfer of information nonetheless. It would be sacrilege to just sit back and allow such evident spirit of patient care to dissipate into thin air. As such, the organizing committee agrees that worthy information be disseminated for sharing via the Pharmacy Newsletter. With that in mind, this newsletter shall hereon serve as a media for such sharing of knowledge and information towards cultivating a good comprehensive practice in patient care.

Highlights from the 2nd GPP

Among prescribing practice issues mentioned by the presenters and identified during the workshop, those worth highlighting may basically be assigned to four (4) types:

1. Non-conformance to prescribing criteria drawn up by the Pharmacy and Therapeutics Committee of Hospital USM.
2. Prescribing for long duration in nonrelated field of specialty.
3. Abuse of online prescription.
4. Incomplete and improper prescribing.

What's interesting?

GPP HIGHLIGHT : 1

1. NON-CONFORMANCE TO PRESCRIBING CRITERIA DRAWN UP BY THE PHARMACY AND THERAPEUTICS COMMITTEE OF HOSPITAL USM.

Results of two Drug Use Evaluations (DUE) were presented during the workshop which indicated the non-conformance above, i.e DUE on **CELECOXIB** and that of **CLOPIDOGREL.**

I.Summary of Celecoxib Drug Use Evaluation

Celecoxib was listed into our HUSM Drug Formulary in 2001 and may be prescribed ;

a. As a category I item (43rd P & T Committee Meeting) i.e:
1. Prescribable by HUSM Specialists and Medical Lecturers with M.B.B.S.
2. HUSM trainee lecturers/post-graduate medical students / medical officers / house officers, with M.B.B.S. may prescribe on conditions:
   - The prescriptions are countersigned by their respective Medical Lecturer or Specialist (from Hospital USM)
   - Follow-up case of a HUSM Specialist.
   - Discharged HUSM patients (already initiated by HUSM Specialist).

b. Criteria of use: For rheumatoid arthritis and osteoarthritis only (43rd P & T Committee Meeting) **.**

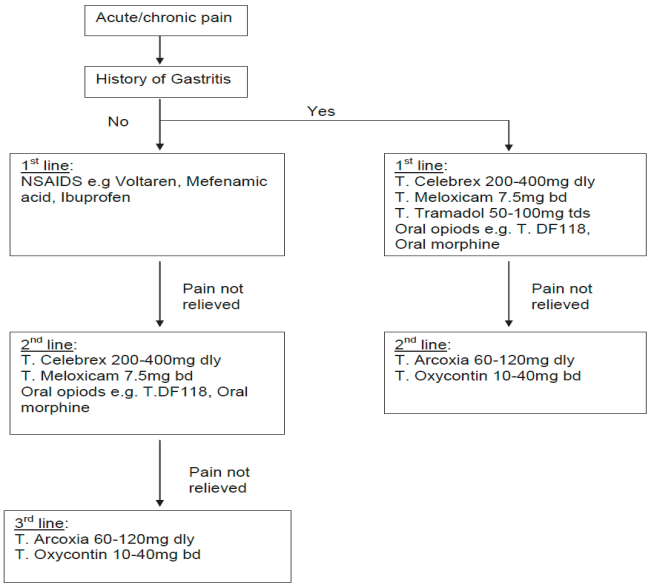
c. In November 2006, the 60th P & T Committee Meeting augmented the prescribing criteria by including the need to **adhere to the pain management protocol** prepared by the Department of Orthopaedics (Refer Flowchart 1 & 2).

Since 2008 Celecoxib has made its way to be in the top 10 ranking of drugs using up the highest amount of our total drug expenditure. And it has remained thus to date (with a yearly procurement RM1.06 million for Celecoxib. In view of its high expenditure, a DUE was executed for Celecoxib to look into adherence to prescribing criteria mentioned, pertaining to prescriptions from KRK and A&E for a period of one month (July 2011) and follow-up cases on celecoxib from at least 2010 onwards. In addition, the evaluation also looked at prescribing practice of celecoxib based on FDA labeled indication. The results of the DUE showed that:

1. Only 48% of the follow-ups were Orthepaedic follow-up cases whereas 52% were non-Orthopaedic cases.
2. Adherence to 43rd P&T criteria : 40%
3. Adherence to 60th P&T criteria for Orthopaedic follow-ups : 58.3%
4. Adherence to 60th P&T criteria for non-Orthopaedic follow-ups : 15.4%
5. Prescribing deviating from "FDA labeled indication" : 26%

Flow Chart 1
Dr. Shamsul Kamalrujan

ARCOXIA PRESCRIPTION FLOW CHART

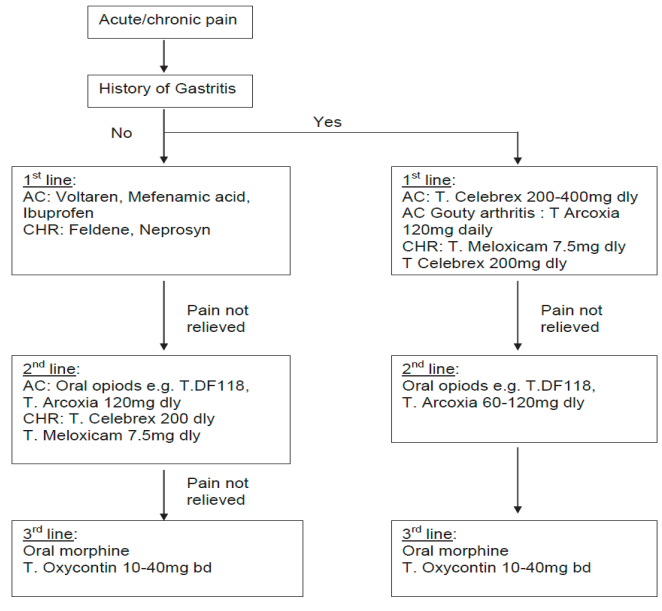


*Prescription: Maximum only for 3/52 Dose: 60mg, 90mg and 120mg
(Depends on severity of the pain and condition of the pain)

N.B: - Etoricoxib 60mg is not available in HUSM
- This flowchart awaits latest updates on pertinent management of pain.

Flow Chart 2
Setelah diubahsuai oleh Jabatan Ortopedik

OUTPATIENT PAIN PRESCRIPTION FLOW CHART



*COX2 Prescription for acute pain: Maximun only for 3/52
Arcoxia Dose: 60mg (OA), 90mg (RA) and 120mg (Acute pain e.g. gouty arthritis)
(Depends on severity of the pain and condition of the pain)
3rd line is same in both pathways

AC – acute
CHR - chronic

These results were presented to the Pharmacy and Therapeutics Committee and communicated to all Heads of Department through a memorandum by the Director of Hospital Universiti Sains Malaysia.

II. Summary of Clopidogrel Drug Use Evaluation

Clopidogrel was listed in 2002 (the 46th P&T Committee meeting - 14th July 2002) as a Category I* item (Restricted Specialists item) for Medical Specialists and Neurologists only with the following guidelines: refer Table 1. The need for a Drug Use Evaluation for Clopidogrel was decided in evidence of its yearly expenditure. So much so that Clopidogrel ranked highest in the year 2009 after which the drug was switched to the generic form in 2010 (refer Table 2).

Table 1: Guidelines on Clopidogrel (Plavix®) Prescription For Cardiology Patients HUSM

ACUTE CORONARY SYNDROME	PERCUTANEOUS CORONARY INTERVENTION (PCI)	INTRACEPT ASD CLOSURE DEVICE	CABG
• NSTEMI/UA = 9 months • STEMI = 8 days	Bare metal stent = 3-4 weeks • Drug eluting stent (DES) = 6-12 months	Clopidogrel x 3 months	No indication

Table 2: Expenditure for Clopidogrel

Year	Expenditure Per Year (RM)
2004	2,887,360.50
2005	1,461,776.42
2006	2,315,477.90
2007	2,835,943.20
2008 (3rd highest expenditure)	2,355,588.00
2009 (Highest expenditure)	2,446,196.00
2010 (not in the top 10 listing of high expenditure)	379,940.00 Switched to GENERIC

The **Drug Use Evaluation on Clopidogrel** was done with the following objectives:

1. To evaluate adherence to P&T criteria
2. To identify duplication of prescribing and supply of Clopidogrel

Adherence to P&T criteria

The Cardiology department was obviously the main user. However only 29.6% adhered to the P&T Criteria. Findings from the DUE is tabled below:

Indication	P&T Criteria Adherence (46th P&T Committee Meeting) N = 71	
	Yes n (%)	No n (%)
Cardiology	**21 (29.6)**	**42 (59.2)**
Acute Coronary Syndrome (ACS)	19 (26.8)	39 (54.9)
NSTEMI/ Unstable angina (9 monts)	18 (25.4)	39 (54.9)
STEMI (8 days)	1 (104)	0 (0)
Percutaneous Coronary Intervention (PCI)	2 (2.8)	3 (4.2)
Bare Metal Stent (3-4 weeks)	1 (1.4)	2 (2.8)
Drug Eluting Stent (6-12 months)	1 (1.4)	1 (1.4)
Intracept Closure Device (ASD) x 3 months	0 (0)	0 (0)
Neurology	**4 (5.6)**	
Other Indications	**4 (5.6)**	

Variable	N= 71
Dupplication of prescription	n (%)
• Yes	47 (66.2)
• No	17 (23.9)
• Unknown	7 (9.9)
Dupplication of drug supply	
• Yes	60 (84.5)
• No	11 (15.5)

Evidently non-conformance to the P&T prescribing criteria and duplication of supply contributed to the high use and expenditure of clopidogrel (PlavixR).

GPP Highlights : 2-4

2. PRESCRIBING FOR LONG DURATION IN NONRELATED FIELD OF SPECIALTY

The Pharmacy & Therapeutics Committee of Hospital Universiti Sains Malaysia allows for prescribing in non-related field of expertise only for short duration and with proper monitoring and documentation, usually to ensure there is no break in patients' supply of medication. Otherwise prescribing for long duration should be pertinent to the the prescribers' field of specialties.

3. ABUSE OF ONLINE PRESCRIPTION

With the implementation of POLS (Prescription On Line System) for out-patient , we would expect an eradication of prescription abuse. Alas, that is not so! There is proof of abuse which requires further attention from higher level such as Mesyuarat Penyelarasan Klinikal to decide on actions required.

4. INCOMPLETE AND IMPROPER PRESCRIBING

Prescribers are called upon to prescribe properly and completely especially at the in-patient setting as on-line prescribing is still under construction for this area. Among discrepancies frequently found were:

<table>
<tr><th>DISCREPANCY</th><th colspan="2">COMMENTS / SUGGESTIONS</th></tr>
<tr><td>No Prescriber's Name</td><td colspan="2">Provision of prescriber's name would fascilitate communication on patient therapy.
Suggests enforcement of Name Stamp provided.</td></tr>
<tr><td>Non-legible prescription writing</td><td>USE CAPITAL LETTERS</td><td rowspan="3">Act 366- Poison's Act 1952: Section21 (5)) states that "No prescription for any Group B Poison shall be written wholly or partly in code or in such manner that it is not readily decipherable and capable of being dispensed by any pharmacist".</td></tr>
<tr><td>Full generic name of drug</td><td>ON-LINE PRESCRIPTION WILL OVERCOME SUCH WEAKNESS</td></tr>
<tr><td>Incomplete patient information on prescription</td><td>USE STICKER / BARCODE (Hospital administrators)</td></tr>
<tr><td>No follow-up prescription for verbal order of drug administration/supply</td><td colspan="2">Verbal/oral order should be followed-up by written prescription within the same day based on Poison's Act 1952:
"any prescription given orally, shall be confirmed by a written prescription within ONE DAY....." (Act 366 - POISON'S ACT 1952 : Malaysian Laws On Poisons and Sale of Drugs, section 24 (3))</td></tr>
</table>

Let us hope that these highlights from our workshop manage to ignite a glitter of awareness among us towards Good Prescribing Practice and ultimately Quality Prescription.

~ NOOR AINI ABU SAMAH (SCIENTIFIC COMMITTEE, GPP - WORKSHOP)

Suggestion and coments.
Let us know what you think by reaching us at:

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We are on the web at
http://www.h.usm.my/pharmacy/