Health and Social Care Board

Medicines Safety Matters

Newsletter for Prescribers & Community Pharmacists

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Focus on the HSCB Prescribing Safety Indicators Project

Background

It is possible to use the data contained within the 2D barcode of scanned prescriptions in order to identify prescribing of medicines with potential safety issues. Prescriptions in NI were searched for patients occurring in the following 5 safety indicator searches and the information fed back to GP practices in August 2013.

Source of indicators

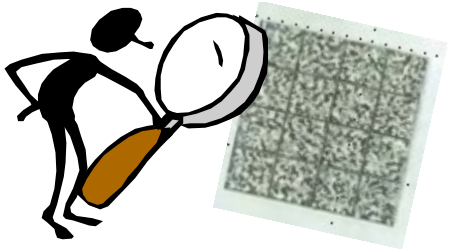
Indicators 1, 2 and 3 are validated prescribing safety indicators taken from the King's Fund Research Paper on The Quality of GP Prescribing.[1] The King's Fund prescribing indicators were devised by a panel of 12 GPs, for use in assessing the safety of GP prescribing for the purposes of revalidation.

Indicator 4 (pregabalin) was developed following local incidents where patients have taken high doses of pregabalin resulting in hospital admissions. Further information is available in the Medicines Safety Alert on pregabalin.[2]

Indicator 5 (Protopic® ointment) was developed following MHRA advice on new age restrictions due to the risk of malignancies.[3]

Method

- Patients were identified from prescriptions issued by GP practices during March - May 2013
- GP practices were emailed in August 2013 and provided with the Health & Care numbers of their patients who were identified in the searches
- GPs were given information on the evidence/guidance to support the rationale for the indicators along with advice on review of patients
- The searches were repeated for October - December 2013, to estimate percentage uptake of advice (calculated as % patients in baseline search not appearing in follow-up search)



Indicators used in the project

1. **Patients taking both verapamil plus a beta blocker**
2. **Patients taking warfarin who have had 2 or more issues of an NSAID over the 3 month period (as a marker of long term NSAID use)**
3. **Aspirin (300mg or more) prescribed to a child < 16 years of age**
4. **Pregabalin being prescribed (or taken) at higher than maximum dose**
5. **Protopic® ointment (tacrolimus)**
   a. **In children under the age of 2 years (either strength i.e. 0.03% or 0.1%)**
   b. **In children aged between 2 and 16 years (0.1% strength)**

Results and conclusions

- The results are summarised in the table overleaf
- Uptake of advice was high (>82%) for all indicators, except for the verapamil/beta-blocker indicator (47%), which may have reflected patients being continued on this combination, under the supervision of secondary care
- The initial email was only sent to practices who had patients appearing in the baseline searches. Since there were new patients and new practices appearing in every indicator at the second time period, it was decided to share this information with all practices and community pharmacies via this newsletter.

GPs and community pharmacists are in an ideal position to work together to identify unsafe prescribing

Table: Summary of risks associated with each indicator, advice to prescribers and estimated uptake of advice

Indicator & no. of patients/GP practices	Potential risk to patients	Summary of advice to prescribers	Estimated % uptake of advice
Verapamil plus beta-blocker combination 131 patients 90 practices	Additive negative inotropic effects on the heart Risk of marked bradycardia, asystole, severe hypotension or heart failure Increase risk of Torsades de Pointes if another drug that prolongs the QT interval added at a later date e.g. erythromycin, citalopram	• Review affected patients • For uncomplicated hypertension or angina it may be appropriate to change from verapamil to e.g. amlodipine • If started by a cardiologist, ensure patient is reviewed and monitored by a cardiologist e.g. once a year	47%
Warfarin plus NSAID (≥ 2 issues of NSAID in the 3 month period) 49 patients 43 practices	Increased risk of life threatening upper GI bleeding	• Review affected patients • Review need for NSAID, signs of bleeding, consider PPI	82%
Aspirin 300mg to a child age < 16 years 16 patients 15 practices	Risk of Reye's syndrome	• Review affected patients • Prescribe a safer analgesic if required e.g. paracetamol or ibuprofen	100%
Higher than maximum dose (600mg daily) of pregabalin. Search was for those taking ≥ 800mg daily. 300 patients 167 practices	Patients have been admitted to hospital with pregabalin overdoses (drowsiness, confusion, agitation, restlessness). See Medicines Safety Alert for more details.[2]	• Review affected patients for appropriate dose • Review prescribing systems if patients are overusing by ordering early	89%
Protopic® Ointment < 2 years receiving any strength 5 patients 5 practices **2-16 years, receiving 0.1% strength** 25 patients 25 practices	Risk of malignancies MHRA recommends to no longer give **any** strength of Protopic® ointment to children < 2 years and only the **lower strength** (0.03%) to 2-16 year olds.	• Review affected patients • Consult with dermatology	< 2 years 100% 2-16 years 92%

References:
1. King's Fund Research Paper on The Quality of GP Prescribing.
http://www.kingsfund.org.uk/sites/files/kf/field/field_document/quality-gp-prescribing-gp-inquiry-research-paper-mar11.pdf
2. Medicines Safety Alert http://www.medicinesgovernance.hscni.net/primary-care/medicines-safety-alerts/
3. Drug Safety Update Bulletin vol 5 Issue 11
http://www.mhra.gov.uk/home/groups/dsu/documents/publication/con157116.pdf