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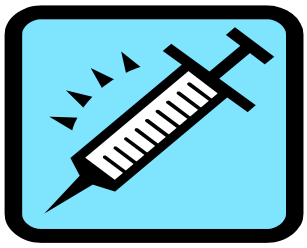
Safety update on use of miconazole oral gel. Miconazole oral gel is licensed for the management of fungal infections of the oral cavity and gastro-intestinal tract in adults and paediatric patients ≥4 months of age. It is available as a prescription-only medicine and as an over-the-counter (OTC) medicine in pharmacies. Miconazole is absorbed systemically and is known to inhibit several P450 isoenzymes, including CYP2C9 (involved in the metabolism of the active S-enantiomer of warfarin). **Reports of possible drug interactions between miconazole and warfarin resulting in bleeding episodes (including events with fatal outcomes) have been reported** to regulatory authorities in recent years (***DTB 2017; 55: 12***). Despite the introduction of risk minimisation measures (outlined in the product information), cases of suspected drug interaction between miconazole oral gel and warfarin continued to be reported. Consequently, a **contraindication has been introduced for concomitant use of miconazole (Daktarin®) oral gel with warfarin, except when miconazole oral gel is specifically prescribed and used under medical supervision with close monitoring of INR.** Clinicians planning to prescribe miconazole oral gel to patients taking warfarin should closely monitor the anticoagulant effects. Patients should be advised **to stop miconazole oral gel and seek immediate medical attention if they experience any sign of bleeding**. The recent *Dear Healthcare Professional* letter outlining the restrictions on its usage is available at: **http://www.hpra.ie/docs/default-source/default-document-library/daktarin_piu__edits-clean_mcneil-final-copy---15-nov-2017.pdf.** The updated Summary of Product Characteristics for miconazole is available at **www.hpra.ie**.

Online nutrition supports toolkit now available! A new resource to support healthcare professionals to provide nutritional care for patients who are at risk of malnutrition in the community setting is now available at: **www.hse.ie/nutritionsupports**. The *nutrition supports toolkit* was developed by a multidisciplinary working group including dietitians, doctors, nurses and pharmacists on behalf of HSE Primary Care, in conjunction with the Medicines Management Programme. It includes practical resources for healthcare professionals and their patients including **a prescribing pathway for the initiation and renewal of standard oral nutritional supplements (ONS) for adults living in the community.** This guidance provides useful tips on the prescribing of ONS and a preferred product prescribing list for ONS (designated as first, second or third choice depending on the patient circumstances). **Practical resources** in the toolkit for use with patients include: a 4-page high protein, high energy diet sheet and a cookbook "*Making the most of every bite*", aimed at patients who are at risk of malnutrition e.g. have lost weight unintentionally due to disease, treatment, or social circumstances. The cookbook was developed by dietitians and colleagues from UCC; healthcare professionals can download or order hardcopies at **www.healthpromotion.ie**. Nutritional care information for late stage palliative care patients, their families and carers is also included in the toolkit.

[**Editor's note**: ONS are an effective treatment for disease-related malnutrition, and if targeted at appropriate patient groups they are effective in improving patient outcomes and reducing overall healthcare costs. However Irish and international evidence suggests that approximately 30% of ONS prescribing may be inappropriate when they are prescribed for patients who are unlikely to have a clinical benefit from their use. This toolkit should be helpful in promoting the evidence-based use of ONS. Find out more about malnutrition and high risk patient groups at: **www.hse.ie/nutritionsupports**]



Impact of HPV vaccination. Human papillomavirus (HPV) types 16, 18, 31, 33 and 45 are responsible for at least 90% of invasive cervical cancers in Scotland. In 2008, Scotland introduced routine vaccination with bivalent HPV vaccine (types 16 and 18) for 12 to 13 year old girls. A 3-year catch-up immunisation programme for older girls (13 to 17 years) was also delivered from 2008 to 2011. There was a 92% uptake during the first year and annual uptakes of at least 90% have been reported ever since. The bivalent vaccine was delivered until 2012, when a switch was made to quadrivalent vaccine (the vaccine used in the Irish immunisation programme). A recent study evaluated the effectiveness of the bivalent vaccine in vaccinated women who attended for routine cervical screening at 20 to 21 years of age (***Lancet Infect Dis 2017; 17: 1293-302***). From 2009 to 2015, cytology samples (approximately 1,000/year), taken as part of routine cervical screening, were collected from regional laboratories (target number from each laboratory ensured a geographically representative sample) and subjected to HPV genotyping at the Scottish HPV Reference Laboratory. **The prevalence of each detectable HPV type was calculated and presented according to birth cohort (1988-1995), study year, vaccination status (and age at vaccination) and deprivation index**. Potential herd immunity (in unvaccinated women) was also evaluated for each year.

Results: a total of 8,584 samples were successfully genotyped during the study period. The proportion of vaccinated individuals increased with each study year from 35.6% in 2011 to 86% in 2015. **The overall impact of vaccination on the prevalence of HPV types 16 and 18, adjusted for birth cohort and deprivation index, showed a clear increase in vaccine effectiveness in those immunised at an earlier age**. There was also evidence of "herd immunity" in non-vaccinated women: there was a substantially reduced odds of infection with HPV 16 and 18 recorded in unvaccinated women from the 1995 birth cohort compared with the 1988 cohort. Of interest, **the bivalent vaccine was also associated with substantial decreases in the prevalence of HPV types 31, 33, and 45**; this effect was lower in those vaccinated at an older age (85% in those vaccinated at 12-13 years vs. 29.5% for ≥18 years). Moreover, there was no significant increase in other high-risk HPV types (i.e. types 16, 18, 31, 33, 45); therefore there was no evidence of replacement by other HPV types, at least during the 7-year follow-up period. A limitation of the study is that the results are based on women who attended for screening, which equates to just 50% of the population, resulting in potential bias. It was noted that the lowest vaccine uptake was recorded in the most deprived, who are disproportionately affected by cervical malignancy; therefore these findings reinforce the need for appropriate delivery and update of cervical screening. The authors conclude that these promising results require further follow-up which will provide more complete information on the duration of immunity, which may impact on how cervical cancer screening needs to be delivered in the future.

Updated Travel information from NIAC. The National Immunisation Advisory Committee (NIAC) has **updated its advice on immunisations and health information for travel**. The updated recommendations (contained in chapter 5 of the Immunisation Guidelines for Ireland) are based on current expert advice from NIAC; therefore **healthcare professionals are advised to follow this advice,** even if it differs from the Summary of Product Characteristics of the vaccines. The updated advice is available for download at:
www.hse.ie/eng/health/immunisation/hcpinfo/guidelines/chapter5.pdf

Every effort has been made to ensure that this information is correct and is prepared from the best available resources at our disposal at the time of issue. References are available on request. This ***newsletter is produced by the National Medicines Information Centre, St. James's Hospital (SJH) Dublin 8 and Dept of Therapeutics Trinity College, Trinity Centre, SJH.*** *Tel: Direct Line (01) 473 0589 or 1850 727 727 Email: nmic@stjames.ie*