衞生署藥物辦公室
藥物資訊及警戒科
香港九龍觀塘巧明街 100 號
Landmark East 友邦九龍大樓
20 樓 2002-05 室

DEPARTMENT OF HEALTH
DRUG OFFICE
DRUG INFORMATION AND PHARMACOVIGILANCE DIVISION
Suites 2002-05, 20/F, AIA Kowloon Tower,
Landmark East, 100 How Ming Street,
Kwun Tong, Kowloon, Hong Kong

電話號碼 Tel. No.: 3974 4175
詢問處 Enquiries: (852) 3974 4175
傳真號碼 Faxline No.: (852) 2803 4962
本署檔號 OUR REF.:
(來函請敍明此檔案號碼) DH DO DIMC/7-30/1
(IN REPLY PLEASE QUOTE THIS FILE REF.)

5 Oct 2022

Dear Healthcare Professionals,

Peripheral neuropathy with supplementary vitamin B6 (pyridoxine)

Your attention is drawn to the Australia Therapeutic Goods Administration's (TGA) announcement that adverse event reports submitted to the TGA suggest there is a lack of awareness that vitamin B6, which is present in many multivitamin and mineral supplements, can cause peripheral neuropathy. In response, the TGA has strengthened labelling requirements so products containing daily doses over 10mg of vitamin B6 must carry a warning about peripheral neuropathy.

Peripheral neuropathy is a known side effect of vitamin B6 and is characterised by tingling, burning, or numbness, usually in the hands or feet. Delayed diagnosis and continued exposure can lead to progression of neuropathy. Because of this risk, medicines containing daily doses of vitamin B6 over 50mg or equivalent have been required to carry the following statement: "WARNING - Stop taking this medication if you experience tingling, burning or numbness and see your healthcare practitioner as soon as possible. (Contains vitamin B6)".

Vitamin B6 is commonly present in off-the-shelf products (listed medicines) such as multivitamin and mineral preparations and vitamin B complexes, often in combination with magnesium or zinc. There are currently three forms of vitamin B6 available in products: pyridoxine hydrochloride, pyridoxal 5-phosphate and pyridoxal 5-phosphate monohydrate.

Adverse event reports submitted to the TGA suggest there is a lack of awareness that vitamin B6 can cause peripheral neuropathy. This is particularly the case when symptoms have developed in patients consuming one or more products that do not carry a warning because they contain less than 50mg of vitamin B6. Up to 5 Aug 2022, the TGA had received 32 adverse event reports with sufficient information to establish a possible causal association between peripheral neuropathy and products containing vitamin B6. In many cases, people reported they were unaware they had consumed vitamin B6 as the product they

were taking was a magnesium supplement. Of these 32 cases:

- 22 (69%) reported elevated vitamin B6 blood levels with peripheral neuropathy symptoms.
- 21 (66%) involved daily doses of 50mg of vitamin B6 or less.
- 9 (28%) involved multiple medicines containing vitamin B6, some of which did not have a label warning because they contained less than 50mg of vitamin B6.

The TGA is also aware of similar reports overseas, which indicate that peripheral neuropathy may occur at a daily dose of less than 50mg of vitamin B6, or in people taking more than one product containing vitamin B6.

A public consultation highlighted that there is no minimum dose, minimum duration of use, form of vitamin B6 or identified patient risk factors that are established for peripheral neuropathy. The risk appears to vary depending on individual differences in people. Some cases of peripheral neuropathy associated with vitamin B6 were also from what appears to be excessive intake, or simultaneous consumption of multiple medicines containing vitamin B6.

In response, the TGA has made the following regulatory changes:

- Products containing vitamin B6 in daily doses above 10mg now require a label warning about the risk of peripheral neuropathy.
- Products must not provide more than 100mg of vitamin B6 per day for adults (previously 200mg), with lower daily dosage limits for children depending on the age group.

Please refer to the following website in TGA for details:
https://www.tga.gov.au/news/safety-updates/peripheral-neuropathy-supplementary-vitamin-b6-pyridoxine

In Hong Kong, there are registered pharmaceutical products containing vitamin B6 substances, including pyridoxine and pyridoxal. So far, the Department of Health (DH) has received 7 cases of adverse drug reaction related to pyridoxine, but these cases were not related to peripheral neuropathy. The DH has not received any case of adverse drug reaction related to pyridoxal. Related news was previously issued by TGA, and was posted on the Drug Office website on 5 May 2020. In light of the above TGA's announcement, the matter will be discussed by the Registration Committee of the Pharmacy and Poisons Board.

Please note that this letter serves as a means for the DH to communicate important new safety information about registered pharmaceutical products with healthcare professionals in Hong Kong and is not intended to serve as guidelines or to replace professional clinical judgement. Healthcare professionals are advised to balance the risk of possible adverse effects against the benefit of treatment.

Please report any adverse events caused by drugs to the Adverse Drug Reaction Unit of the DH (tel. no.: 2319 2920, fax: 2319 6319 or email: adr@dh.gov.hk). For details, please refer to the website at Drug Office under "ADR Reporting": http://www.drugoffice.gov.hk/adr.html. You may wish to visit the Drug Office's website for subscription and browsing of "Drug News" which is a monthly digest of drug safety news and information issued by Drug Office.

Yours faithfully,

(Terence MAN)
for Assistant Director (Drug)