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MEDIA RELEASE

ORAL CORTICOSTEROIDS FOR ASTHMA: POTENTIAL TOXICITY WITH CUMULATIVE DOSES

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ONE-quarter of people with asthma who use inhaler controllers are dispensed potentially toxic cumulative oral corticosteroid doses, according to new research published online today by the *Medical Journal of Australia*.

Associate Professor Mark Hew, Head of Allergy, Asthma and Clinical Immunology at the Alfred Hospital in Melbourne, and colleagues, analysed a 10% random sample of Pharmaceutical Benefits Scheme (PBS) dispensing data, specifically of people aged 12 years or more who were treated for asthma during 2014–2018, according to dispensing of controller inhaled corticosteroids (ICS).

“Oral corticosteroids (OCS) are used for treating acute asthma attacks, and sometimes for longer term control, but the risk of long-term toxicity increases with cumulative doses exceeding 1000 mg prednisolone,” wrote Hew and colleagues.

“[We found that] 124 011 people had been dispensed at least two prescriptions of ICS during 2014–2018 and met the study definition for asthma, of whom 64 112 (51.7%) had also been dispensed OCS, including 34 580 (27.9% of the asthma group) cumulatively dispensed 1000 mg prednisolone-equivalent or more,” they found.

“We estimate that [in Australia] almost 350 000 people with asthma were cumulatively dispensed 1000 mg oral prednisolone-equivalents or more during 2014–2018, a level associated with long term systemic toxicity.

“While we did not specifically examine harms, we found that larger proportions of patients cumulatively dispensed 1000 mg prednisolone-equivalents or more were also dispensed medications for treating diabetes or osteoporosis than of people receiving lower amounts. The need for frequent short courses or long term OCS therapy is neither benign nor acceptable.”

Of equal concern, “many patients dispensed OCS are not adhering to appropriate ICS controller therapy”.

“Over 12 months ... [among] patients with asthma on high-dosage controllers ... dispensed ≥ 1000 mg prednisolone-equivalent, more than half ... had inadequate (<50%) controller usage.”

Hew and colleagues suggested that as three-quarters of OCS prescriptions were provided by GPs, patients for whom OCS therapy was needed should undergo a comprehensive asthma review by their GP, focusing on education and medication adherence.

“Until methods for objective checking of adherence and more reliable monitoring of disease activity are available, patient review should include checking their inhaler and peak flowmeter technique, updating their treatment plans, and assessing them for treatment escalation according to national guidelines or for specialist review,” they wrote.

“Measures for assuring adequate asthma control should include thorough primary care review and, when appropriate, referral to specialist care or specialised asthma centres for difficult-to-treat patients,” they concluded.

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