

SAND abstract No. 125 from the BEACH program 2007–08

Subject: Oral corticosteroid use and osteoporosis

Organisation supporting this study: Sanofi-Aventis Australia Pty Ltd

Issues: Prevalence of long-term oral corticosteroid (OCS) treatment; conditions for which long-term OCS treatment is used; regimen details and duration of use of OCS; proportion of patients on long-term OCS use who are also being treated with bisphosphonate, have their bone mineral density measured, have experienced fractures from minor falls or other minor trauma, have been diagnosed with corticosteroid induced osteoporosis (CIO); proportion of patients diagnosed with CIO who have been referred to a specialist.

Sample: 3,050 patients from 103 GPs; data collection period: 26/02/08 – 01/04/08.

Method: Detailed in the paper entitled 'SAND Method 2008–09' available at: <www.fmrc.org.au/publications/SAND_abstracts.htm>.

Summary of results

The age distribution of the sample was similar to that of patients at all BEACH encounters 2007–08. However, it included fewer males (38.4%, 95% CI: 35.3–41.6) than at total BEACH encounters (43.7%, 95% CI: 42.9–44.5).

Of the 3,050 surveyed patients, 312 (10.2%) had used or were currently using an OCS, and 101 (3.3%) of these had been taking an OCS for at least 3 months (long term users). Ninety-six of the long-term OCS users listed 98 indicator conditions, 36.7% being musculoskeletal and 22.4% respiratory. Rheumatoid arthritis was the condition most commonly treated with long-term OCS (17.3%), followed by polymyalgia rheumatica (11.2%) and asthma (9.2%).

Of the 101 long-term OCS users: 99 gave details of the OCS used and 60 of these were using prednisolone, 30 prednisone, and 7 another oral steroid; 77 responded to the question on current use of biphosphonate and 18 (23.4%) of these were currently using a bisphosphonate; of 63 reporting past use bisphosphonate, 11 (17.5%) had previously taken a bisphosphonate.

Of 100 long-term OCS users reporting bone mineral density assessment status, 39 had not been tested for bone mineral density, 11 were tested annually, 6 were tested more than once a year, and 37 were tested less than once a year. The question on fractures was answered by 98 long term OCS users of whom 20 (20.4%) had suffered a fracture following minor trauma. Of 99 respondents to the question on CIO, 11 (11.1%) had CIO and 8 of these had been referred to a specialist.

There were 40 long term OCS users with an average recorded daily dose of at least 7.5 mg (classified as high dose users). Of these, 26 (65.0%) were using prednisolone, and 14 (35.0%) prednisone. Of 31 long-term high dose users who responded to the question on biphosphonate use, 9 (29.0%) were currently using a bisphosphonate and of 21 reporting previous use, 5 (23.8%) had previously taken a bisphosphonate.

Of 40 long-term high dose OCS users, 18 (45.0%) had not had a bone mineral density test, 5 were tested annually, 3 were tested more than once a year, and 11 were tested less than once a year. Of 39 respondents, 8 (20.5%) had suffered a fracture following minor trauma. Four patients (10.3%) had CIO and two had been referred to a specialist.

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AIHW Australian GP Statistics and Classification Centre, 2009. SAND abstract No. 125 from the BEACH program: Oral corticosteroid use and osteoporosis. Sydney: AGPSCC University of Sydney. ISSN 1444-9072

PLEASE READ CAREFULLY

The shaded section of the following forms asks questions about **ORAL CORTICOSTEROID USE**.
 You may tear out this page as a guide to completing the following section of forms.

INSTRUCTIONS

Ask **ALL** of the **next 30 PATIENTS** the following questions in the order in which the patients are seen.

Please **DO NOT** select patients to suit the topic being investigated.

Oral corticosteroid use

Please use the tick boxes to advise whether the patient is **currently** being, or has **previously** been, treated with **oral corticosteroids**.

If the patient has **not** been treated with oral corticosteroids you should **end the questions here**.

Condition/s managed with oral corticosteroids

Where oral corticosteroids are being, or have been used, please write in the space provided the **condition/s** for which the oral corticosteroid is/was taken.

Medication - Regimen and duration of oral corticosteroid use

Please use the tick boxes to advise the type of oral corticosteroid taken by the patient, and write in the **current or most recent regimen details**. Under '**duration of use**', please write a number and circle an option (months or years) to indicate how long the oral corticosteroid has been/was being used.

Management with Bisphosphonate

Please use the tick boxes to advise whether the patient is currently/was previously also treated with **bisphosphonate**.

Previous fractures from minor trauma

Please use the tick boxes to advise whether the patient has ever suffered a **bone fracture** resulting from a minor fall or other **minor trauma**.

Specialist referral

Where CIO has been diagnosed, please advise whether the patient has been **referred to a specialist**.

Testing of bone mineral density

Please use the tick boxes to advise **how often** the patient's **bone mineral density** is assessed.

If details of previous testing are **unknown**, or if the patient has **not been tested**, please tick the appropriate box.

Corticosteroid induced osteoporosis

Please advise whether the patient has been **diagnosed with corticosteroid induced osteoporosis (CIO)** as a result of long term oral corticosteroid use. This diagnosis may have been made by you or by another clinician, today or on a previous occasion.

If the patient has not been diagnosed with CIO you should end the questions here.

<p>Has this patient been treated with oral corticosteroids?</p> <p><input type="checkbox"/> Currently, for ≥ 3 mths</p> <p><input type="checkbox"/> Previously, for ≥ 3 mths</p> <p><input type="checkbox"/> Currently or previously, for < 3 mths</p> <p><input type="checkbox"/> Never → End questions</p>	<p>If oral steroids were taken, for what condition/s was this treatment used?</p> <p>_____</p> <p>_____</p> <p>BL100C</p>	<p>Medication management:</p> <p>Which oral steroid is/was most recently taken?</p> <table border="0"> <tr> <td>Name</td> <td>form</td> <td>strength</td> <td>dose</td> <td>frequency</td> <td>Duration of use</td> </tr> <tr> <td><input type="checkbox"/> Prednisolone</td> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____ mths/ yrs</td> </tr> <tr> <td><input type="checkbox"/> Prednisone</td> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____ mths/ yrs</td> </tr> <tr> <td><input type="checkbox"/> other oral steroid</td> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____ mths/ yrs</td> </tr> </table> <p><i>(please circle)</i></p> <p>Is/was the patient treated with bisphosphonate?</p> <p>Currently - <input type="checkbox"/> Yes <input type="checkbox"/> No Previously - <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	Name	form	strength	dose	frequency	Duration of use	<input type="checkbox"/> Prednisolone	_____	_____	_____	_____	_____ mths/ yrs	<input type="checkbox"/> Prednisone	_____	_____	_____	_____	_____ mths/ yrs	<input type="checkbox"/> other oral steroid	_____	_____	_____	_____	_____ mths/ yrs	<p>How often is bone mineral density assessed?</p> <p><input type="checkbox"/> Annually</p> <p><input type="checkbox"/> $>$ once per year</p> <p><input type="checkbox"/> $<$ once per year</p> <p><input type="checkbox"/> Not tested</p> <p><input type="checkbox"/> Unknown</p>	<p>Has the patient ever suffered fracture/s following minor trauma?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>	<p>Has the patient been diagnosed with corticosteroid induced osteoporosis (CIO)?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No → End questions</p>	<p>If 'Yes' to diagnosed CIO, has the patient been referred to a specialist?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>
Name	form	strength	dose	frequency	Duration of use																									
<input type="checkbox"/> Prednisolone	_____	_____	_____	_____	_____ mths/ yrs																									
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