

SUMMARY OF GUIDELINE

Bone Density Measurement (BMD) in Women

For full Guideline please go to website: <http://www.bcguidelines.ca>

| Topic | Details | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--------------------|--------------------|------------------|--|---|----------------------------------|--------------------------------------|------------------------------|---|-----------|--|----------------------------|--------------------------|--|----------------|------------------|----------------------------|---------------------------|-------------------------------|------------------------|--|--|
| BMD Screening..... | BMD measurement is NOT RECOMMENDED as a screening procedure for women under age 65 or as part of a routine evaluation around menopause. | | | | | | | | | | | | | | | | | | | | | | |
| Indications for BMD measurement using DXA | <p>BMD measurement should only be performed when:</p> <ul style="list-style-type: none"> • Results are likely to alter patient care, and • Patients have at least one major or two minor risk factors for osteoporosis: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Major Risk Factors</th> <th style="text-align: left;">Minor Risk Factors</th> </tr> </thead> <tbody> <tr> <td>• Age ≥ 65 years</td> <td>• Past history of clinical hyperparathyroidism</td> </tr> <tr> <td>• Low trauma vertebral compression fracture</td> <td>• Chronic anticonvulsant therapy</td> </tr> <tr> <td>• Low trauma fracture > age 40 years</td> <td>• Low dietary calcium intake</td> </tr> <tr> <td>• Family history of osteoporotic fracture (esp. maternal hip)</td> <td>• Smoking</td> </tr> <tr> <td>• Current systemic glucocorticoid therapy > 3 mo. duration</td> <td>• Excessive alcohol intake</td> </tr> <tr> <td>• Malabsorption syndrome</td> <td>• Excessive coffee intake (> 4 cups/day)</td> </tr> <tr> <td>• Hypogonadism</td> <td>• Weight < 57 kg</td> </tr> <tr> <td>• Menopause < age 45 years</td> <td>• Chronic heparin therapy</td> </tr> <tr> <td>• Primary hyperparathyroidism</td> <td>• Rheumatoid arthritis</td> </tr> <tr> <td></td> <td>• Short-term weight loss > 10% from weight at age 25</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Irrespective of BMD results, lifestyle modification should be recommended (adequate calcium and vitamin D, avoidance of smoking and rapid weight loss, participation in regular weight-bearing exercise, falls avoidance). | Major Risk Factors | Minor Risk Factors | • Age ≥ 65 years | • Past history of clinical hyperparathyroidism | • Low trauma vertebral compression fracture | • Chronic anticonvulsant therapy | • Low trauma fracture > age 40 years | • Low dietary calcium intake | • Family history of osteoporotic fracture (esp. maternal hip) | • Smoking | • Current systemic glucocorticoid therapy > 3 mo. duration | • Excessive alcohol intake | • Malabsorption syndrome | • Excessive coffee intake (> 4 cups/day) | • Hypogonadism | • Weight < 57 kg | • Menopause < age 45 years | • Chronic heparin therapy | • Primary hyperparathyroidism | • Rheumatoid arthritis | | • Short-term weight loss > 10% from weight at age 25 |
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| Investigating low-trauma (“fragility”) fractures via BMD measurement | <p>There are two situations where patients can be assumed to have osteoporosis and BMD is not required to make the diagnosis; however, it may be useful to monitor the effects of treatment:</p> <ul style="list-style-type: none"> • Low-trauma fractures (due to an injury that would be insufficient to fracture normal bone). • Loss of ≥2 cm of height in one year or 5 cm over a lifetime (not resulting from other causes). | | | | | | | | | | | | | | | | | | | | | | |
| Inappropriate indications for BMD measurement..... | <ul style="list-style-type: none"> • Chronic back pain (aiming to rule out vertebral fractures). • Kyphosis (best investigated using lateral thoracic spine x-rays to rule out anterior compression fractures). • Menopause, in the absence of risk factors. | | | | | | | | | | | | | | | | | | | | | | |
| Follow-up BMD measurements using DXA | <p>Not required more frequently than q2years, except in patients:</p> <ul style="list-style-type: none"> • On ≥7.5 mg prednisone/day (or equivalent) x 3 months who require baseline and q6month DXA while on treatment. • With existing fractures or very low bone density where early DXA is indicated. | | | | | | | | | | | | | | | | | | | | | | |

NOTE: BMD measurement is generally performed using dual energy x-ray absorptiometry (acronym is DXA or DEXA).