You asked about...

Answers to your questions from medical experts

This month:

1. **What is the most convenient and cost-effective way to treat genital warts in the GP's office?**
2. **What about bisphosphonates for a patient with hypertension and osteoporosis?**

1. What is the most convenient and cost-effective way to treat genital warts in the GP's office?

Question submitted by: Dr. Saroj Kumar, general practitioner, Vancouver, BC

There are four main treatments for vulvar condyloma that are easily utilized in the office. The first three of these treatments are applied by the practitioner on a weekly basis, and destroy the infected tissue. All three can be purchased inexpensively, and may be kept in a cupboard until needed. One container can treat several patients, as long as technique is maintained to prevent cross contamination.

1. Liquid nitrogen is frequently used for condyloma of the hands and feet, and can also be used on the vulva. An aerosol canister with replaceable foam tips can be purchased as a kit through different pharmacies. Treatment involves simple contact between the applicator tip and skin, and should be in contact for 30 to 45 seconds, taking care to avoid adjacent tissue.

2. Concentrated tricholoroacetic acid (TCA) 50-85% solution is made by a pharmacist and can also be kept in the office for repeated use. A small amount, placed in a medicine cup, is applied weekly to the affected areas for approximately 30-45 seconds with cotton buds. Putting a protective barrier, such as petroleum or 2% xylocaine jelly, around the warts prior to TCA use may help protect the surrounding tissue and decrease the patient's pain. Anecdotal evidence suggests that application of wet, cold tea bags by the patient after the treatment may also help relieve discomfort and pain.

3. 10-25% podophyllum resin can also be supplied by the pharmacy, and applied in a similar way to TCA. Unfortunately the concentration of the active ingredient can be inconsistent, resulting in variable results and side-effects. Podofilox 0.5% solution, a more stable preparation of the active ingredient, is used in a similar fashion. Unlike TCA, podophyllum resin and podofilox are contraindicated in pregnancy.

4. Imiquimod (5%) is a cream applied by the patient three times a week for 12 weeks. Imiquimod enhances the immune response to human papillomavirus, attacking the virus, as opposed to destroying the tissue. This action has the added benefit of avoiding possible scar tissue, and may decrease the recurrence of condyloma that can occur with other treatments. Unfortunately imiquimod is expensive and many patients will not be able to afford it.

There are many other treatments for condyloma, including resection and laser therapy, however most of these are neither practical nor cost-effective in the office.

Answered by: James Graham, MD, FRCSC, fellow reproductive endocrinology, department of gynecology, University of British Columbia, Vancouver, BC.

You asked about...

2 What about bisphosphonates for a patient with hypertension and osteoporosis?

Question submitted by: Dr. Claire Bérard, general practitioner, Hull, Quebec

Gladys, 80, has hypertension (well-controlled) and dorsal kyphosis, and enquires about therapy. She is on calcium (1000 mg daily) and vitamin D (800 UI daily), but no other antiresorptive therapy.

The first step in the assessment of an elderly female with kyphosis includes a history and a physical to exclude reversible factors contributing to bone loss. Approximately 35% of postmenopausel women have a secondary cause for their osteoporosis.

On examination, we should also determine if there is evidence of tenderness on percussion over the thoracic and lumbar spine. In the presence of tenderness, X-rays of the spine should be completed to rule out the possibility of a pathologic fracture, such as occult metastatic lesion or osteomyelitis. Additional investigations would include:

- a complete blood count,
- serum immunoelectrophoresis,
- calcium corrected for albumin
- phosphate,
- thyroid stimulating hormone,
- liver function tests,
- renal function; and
- a 24-hour urine test for calcium and creatinine.[1]

Following exclusion of secondary causes of osteoporosis, we could proceed with quantification of the degree of bone loss present. This is completed by a dual energy X-ray absorptiometry assessment (DXA). The Canadian Panel has provided standards for the appropriate utilization of bone densitometry in postmenopausal women who, over 65, are recommended to have a bone density assessment.[2,3] A bone density assessment with DXA of the lumbar spine and the hip should be completed to evaluate the degree of bone loss present, and to assess response to therapy.

Antiresorptive therapy has been shown to be effective in decreasing vertebral and non-vertebral fractures. The aminobisphosphonates alendronate and risedronate have been shown to effectively reduce vertebral and non-vertebral fractures. Hormone replacement therapy (HRT) can reduce vertebral and non-vertebral fractures, however, due to the associated increase in the adverse events with an increase in the risk of breast cancer, heart disease and stroke, HRT is not considered first-line treatment, whereas bisphosphonates are. Raloxifene is approved as first-line treatment for osteoporosis while calcitonin is also approved for such treatment. Gladys will benefit from bisphosphonate therapy if her renal function is normal, and there is no evidence of vitamin D deficiency or osteomalacia. This is confirmed by checking the serum creatinine, as well as the corrected serum calcium and phosphate levels. CME

Answered by: Aliya Khan, MD, FRCPC, FACP, associate clinical professor of medicine, divisions of endocrinology and geriatrics, McMaster University, Hamilton, Ontario.

References

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3. Khan AA, Brown J, Faulkner K, et al: Standards and guidelines for performing central dual X-ray densitometry from the Canadian panel of International Society for Clinical Densitometry. Journal of Clinical Densitometry 2002: 5(4):435-45.