

**VACCINATION UPDATE:  
NEW VACCINES FOR THE PRIMARY CARE PHYSICIAN**

**Educational Objectives:**

1. Describe the indications and contraindications for Zostavax
2. Know the recommendations for immunization against HPV
3. Understand the appropriate use of Tdap

**CASE ONE:**

A 62-year-old man comes into your clinic asking for the “shingles” vaccine. His wife has shingles, and he is afraid of catching it from her as he has been helping to clean her painful vesicles. Upon questioning, he remembers having had chickenpox when he was a child and asks you if he may be protected by having had the illness “way back when.”

**Questions:**

1. **This man has his information mixed up! What’s the real truth behind chickenpox and zoster infection?**
  
2. **Who should receive Zostavax? Who should not get Zostavax?**
  
3. **What is the efficacy of Zostavax?**

**CASE ONE CONTINUED:**

**The patient asks what complications he could get from the vaccine. His wife asks if she should receive the vaccine after she gets better to prevent getting shingles again. Your nurse asks if the varicella vaccine is the same as Zostavax.**

4. **What are common side effects of Zostavax?**
  
4. **Should one give Zostavax to patients with a history of VZV (shingles)?**
  
5. **Can you use varicella virus vaccine if Zostavax is unavailable? Are they the same?**

#### **CASE TWO:**

**A 20-year-old woman comes to your office. She moved from another state where her primary care physician told her she had an abnormal pap smear for which she had a cone-biopsy. She was told her abnormal pap was associated with the HPV virus and must be followed closely. She has just read about the new HPV vaccine, and she inquires whether it is “too late” for her, and whether it will help fight the virus she has. She is single, takes oral contraceptives, and has two partners with whom she has intermittent intercourse, almost always with condoms.**

6. **Who should receive the HPV vaccine? In terms of overall prevalence, according to age group, what percentage of women 18 – 25 who have had only two lifetime partners will be positive for HPV? What percentage of all women 18-25 are infected with HPV?**
  
7. **How is the vaccine administered and dosed? Does one need to do a pap and test for HPV before vaccination? Does the pap screening timetable change after vaccination?**
  
8. **HPV has been associated with what other cancers?**

**CASE THREE:**

**Tdap-ADACEL®**

**On June 10, 2005 a tetanus toxoid reduced diphtheria toxoid and acellular pertussis vaccine was licensed.**

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**9. Which of these patients should get the new ADACEL vaccine? Defend your answer.**

**Tdap = ADACEL®**

**DT = older preparation Diphtheria/Tetanus toxoid only**

- **A new 32-year-old mother comes in with her 6-month-old. She had her last DT when she cut her finger three years ago.**
  
- **A 70-year-old traveler to India and Nepal. He is leaving in three weeks, and his last DT booster after childhood immunizations was over 15 years ago.**
  
- **A 24-year-old house officer who received her DT in medical school four years ago.**
  
  
- **A 50-year-old man who had DT primary series as a child and is in for a routine physical – no history of injury or plan for travel. When should he get his next booster and with what preparation?**

**Primary References:**

1. Centers for Disease Control and Prevention . Recommended Adult Vaccination Schedule – United states , October 2007- September 2008. Available at:  
<http://www.cdc.gov/vaccines.recs/schedules/adult-schedule.htm>
  
2. Oxman MN, Levin MJ, Johson GR et al. A vaccine to prevent herpes zoster and postherpetic neuralgia in older adults. *New England Journal of Medicine*. 2005;352:2271-2284.

3. Centers for Disease Control and Prevention. Vaccine Information Sheet. Tetanus, Diphtheria, and Pertussis: What You Need to Know.  
<http://www.cdc.gov/vaccines/pubs/vis/downloads/vis-tdap.pdf>
4. Centers for Disease Control and Prevention. HPV and HPV Vaccine: Information for Health Care Providers.. August 2006. Available at:  
<http://www.cdc.gov/std/hpv/STDFact-HPV-vaccine-hcp.htm>

**Additional Reference:**

5. Centers for Disease Control and Prevention. Preventing tetanus, diphtheria, and pertussis among adults: Use of tetanus toxoid, reduced diphtheria toxoid and acellular pertussis vaccine. *MMWR*. 2006;55(RR17):1-33. (The definitive reference on the pertussis vaccine, available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5517a1.htm>, worth a read when time allows)