Managing Adolescent Breast Masses

BY MARY ELLEN SCHNEIDER
Senior Writer

NEW YORK — When evaluating a breast mass in an adolescent, keep in mind that breast cancer is rare in this population and imaging should be limited, Dr. Patricia Simmons advised physicians at a gynecology conference sponsored by Mount Sinai School of Medicine.

Studies of the histopathology of young patients who had surgery for a breast mass show that the most consistent finding is fibroadenoma, though some had fibrocystic changes, abscess, and infection, and in very rare cases, malignant disease, said Dr. Simmons, professor of pediatrics at the Dayo Clinic in Rochester, Minn.

In the rare case of a malignant mass, it is likely to be the type of tumor found more commonly in young patients, such as primary or metastatic rhabdomyosarcoma, metastatic neuroblastoma, or lymphoma, she said.

In those cases, patients did not discover the masses through self-breast exam but generally presented with constitutional symptoms such as fever, night sweats, and weight loss.

The clinical experience in breast masses in adolescents is largely anecdotal, and the surgical experience is limited, Dr. Simmons said. But for the most part, breast masses in adolescent women are benign, cancer is rare, and when cancer occurs, it is generally not carcinoma, she said.

When evaluating a breast mass in adolescents, physicians should consider the duration, the constitutional symptoms, and the risk factors for malignancy. Keep in mind that in young women, the risk factors are different, because the patient hasn’t lived long enough to develop most of the factors considered in adults, Dr. Simmons said. The risk factors in adolescents are generally cancer history and whether the patient has had chest radiation.

During the physical exam, the mass size and character, breast skin changes, nodes, and organomegaly should be assessed.

In cases in which the diagnosis is uncertain, imaging will be necessary. However, while a mammogram is the go-to test for adults, this type of imaging is ineffective in adolescents because the young breast is denser and denser, and the surgical experience is limited, Dr. Simmons said. An ultrasound will be much more sensitive, she said.

Surgery may be indicated in cases such as a recurring cyst that is symptomatic; a growing, disfiguring mass; suspected cystosarcoma phylloides; suspected papilloma; suspected papillomatosis; or an abscess.

When considering surgery for a fibroadenoma, physicians should assess the course, the certainty of the diagnosis, any worrisome features, size and distortion, and tolerance, Dr. Simmons said.

In a case in which the mass is distorting the breast, surgery is probably the right choice, because it is interfering with normal life, she said. However, she cautioned physicians not to opt for surgery just because the mass is worrisome to the mother.

“I think we need to arm our patients with the facts, and we should be able to alleviate anxiety if that anxiety is misplaced and not take the [fibroadenoma] out just because it’s there,” she said.

In many cases, it is fine to watch a fibroadenoma in an adolescent patient since most will be benign and not progressive, Dr. Simmons said. “We should be conservative with the indications to preserve breast architecture and breast-friendliness to the extent we can,” she said.

One-Third of U.S. Girls Sexually Active by Age 15

BY COLIN NELSON
Contributing Writer

BOSTON — By age 15, more than a third of American girls say they are sexually active, according to a Centers for Disease Control and Prevention survey. About 26% have had oral sex, 26% have had vaginal intercourse, and another 8% have had oral sex without intercourse. The proportion that is sexually active grows substantially every year thereafter, according to a presentation at a conference on contraceptive technology sponsored by Contemporary Forums.

Accurate data on teenagers’ sexual behavior are important for any clinician concerned about unintended pregnancy and the spread of sexually transmitted infections as well as the psychological and emotional health of young women. If, as expected, the Food and Drug Administration approves a human papillomavirus vaccine in mid-2006, public health officials will need to accurately predict the age when girls become sexually active in order to recommend an age for vaccination.

Media reports increasingly suggest that as conventional teen dating and romance plunge, oral sex and casual sexual encounters among so-called “friends with benefits” have become commonplace. Anecdotal reports of teen promiscuity have seemed to proliferate, after a reporter described teenagers he met through an Internet site where high school and college students post their profiles, chat, and arrange meetings for sex, in “Friends, Friends With Benefits, and the Benefits of the Local Mall” (New York Times, May 10, 2004).

According to the CDC data, the typical teenager who is sexually active has one or two partners, though a substantial minority have many more. Among the 15- to 19-year-olds surveyed, girls had a median of 1.4 sexual partners and boys a median of 1.6. Among all 15- to 19-year-olds, 45% had no sexual partner in the last 12 months, 36% had one opposite-sex partner, and 22% had two or more opposite-sex partners. The percentage with same-sex partners was less than 1%.

The results were released in late 2005 and are based on 2002 data (CDC Advance Data from Vital and Health Statistics, Sept. 2005;362:1-56).

The proportion of all young women having oral sex is relatively high, according to the survey—more than doubling from 26% at age 15 to 70% by age 18 (see box). The gender gap on giving and receiving oral sex was small: Among 15- to 19-year-old females, 44% gave oral sex and 50% received. Among males of the same age 39% gave oral sex and 52% received.

 Amid all this activity the use of condoms is less than fully fledged. Only 44% of female teenagers said their partners used condoms.

Fortunately, the prevalence of STIs remains relatively low. Among all females aged 15-19 years in the survey, some 3% reported genital herpes, genital warts, syphilis, or pelvic inflammatory disease. About half of all STIs occur in people aged 15-25—at a cost estimated in 2000 to be $6.5 billion annually. Some 34% of HIV cases are transmitted during heterosexual vaginal intercourse.

Young Black Women at Risk for Aggressive Breast Tumors

WASHINGTON —aggressive breast tumors, known as “triple negatives,” are significantly more common among black women—especially younger women—than in white women, reported Mary Jo B. Lund, Ph.D., at the annual meeting of the American Association for Cancer Research.

Tumors that test negative for three biomarkers—estrogen receptors (ER), progesterone receptors (PR), and human epidermal growth factor receptor 2 (HER2)—are not only more aggressive than are other subtypes of breast cancer, but they can’t be treated effectively with tamoxifen or trastuzumab, said Dr. Lund of Emory University in Atlanta.

Dr. Lund and her colleagues evaluated the potential racial differences in the incidence of triple-negative tumors in a group of 117 black women and 362 white women aged 20-54 years. The women had been diagnosed with breast cancer between 1990 and 1992 and were enrolled in a population-based, case-control breast cancer study in the Atlanta area.

The overall incidence of triple-negative tumors was 29.9%, but the tumors were significantly more common among black women, compared with white women (47% vs. 22%).

The incidence of triple-negative tumors decreased with age among white women, but was consistent across age groups among black women. “Esentially, across all age groups, black women were twice as likely to have these triple-negative tumors,” Dr. Lund noted.

Younger black women, aged 20-34 years, appeared to be at particular risk; more than 50% of the tumors in this age group were triple negative. In addition, the percentage of triple-negative tumors increased with increasing severity among both races, but the incidence of grade 3 tumors remained higher among black women, compared with the incidence in white women (81% vs. 60%).

Crucial decisions about breast cancer treatment are based on the presence or status of ER, PR, and HER2 tumors, said Dr. Lund. “Almost 30% of all women and 50% of black women have tumors for which there is no targeted therapy.”

Future research on triple-negative tumors should focus on the risk factors, the reasons for increased risk among black women, and the possible roles of genetics and other biomarkers, she added.

—Heidi Splete

## Sexually Active by Age in Female Teenagers

### Source: 2002 data, Centers for Disease Control and Prevention

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## Benefits of the Local Mall

- Advantage: Access to a variety of stores and services in one location.
- Challenge: Balancing the desire for convenience with the need to explore new experiences.
- Opportunity: Engaging in both online and offline activities.
- Threat: Over-reliance on technology and neglecting in-person interactions.

## Gender Gap on Giving and Receiving Oral Sex

- 2002 data, Centers for Disease Control and Prevention
- Source: www.obgynnews.com

## Race and Breast Tumors

- Triple-negative tumors:
  - More common among black women, especially younger women.
  - Challenges in treatment due to lack of targeted therapies.
- Benefits of targeted treatments include:
  - Improvement in survival rates.
  - Reduction in side effects.
- Future research should focus on:
  - Risk factors.
  - Genetics.
  - Other biomarkers.

## Social Media and Teen Health

- Social networking sites provide a platform for adolescents to connect.
- Importance of monitoring online activity for signs of harmful behavior.
- Strategies for parents and educators:
  - Encouraging open communication.
  - Setting clear boundaries.
  - Seeking professional help when necessary.