

15:00 - 15:20

산부인과의 유방 검진

한양대학교 의과대학 산부인과학교실

조 삼 현

Contents

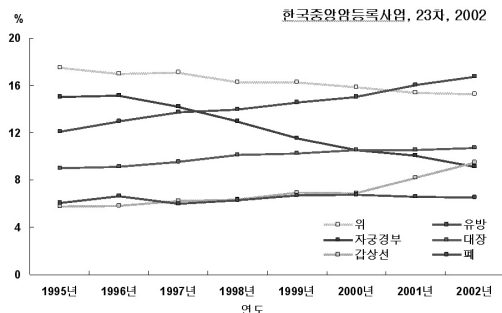
- 검진의 WHO guideline
- 우리나라 여성 암 발생 빈도 변화
- 자궁경부 암 검진 현황 및 도전
- 미국 산부인과 학회의 유방질환 교육 목표
- 미국 의사 손해 보험 협회의 2002년 백서
- 산부인과의사의 역할 및 우리나라 현황
- Breast Cancer Facts & Figures 2007-2008
- Summary

WHO Guidelines

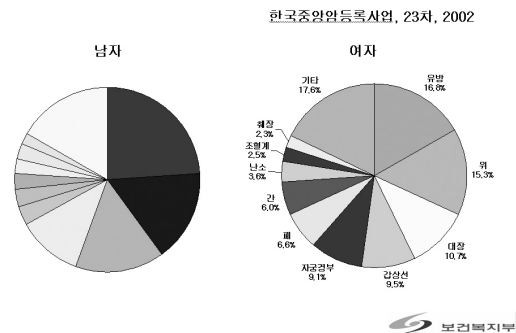
- The disease has to represent an important health problem with a known natural history and recognizable early stage.
- Treatment at an early stage has to be beneficial.
- A suitable test at moderate cost and acceptable to the population has to be available.
- There must be effective early treatment of the abnormality detected.
- The physical and psychological harm of the test and treatment should be less than the benefit.
- The result of screening should be economically beneficial as measured by cost-benefit analysis.

-Wilson JM, Junger YG. WHO 1968-

주요 부위별 발생등록분율 추이 (여자)



원발 부위별 발생등록분율 (성별)



국가별 암 발생 순위(여자)

	한국		일본 ¹⁾		미국 ¹⁾	
	암종	비중	암종	비중	암종	비중
1위	유방암	16.1	위암	20.3	유방암	37.3
2위	위암	15.3	유방암	19.6	대장암	11.5
3위	대장암	10.5	대장암	17.2	폐암	8.3
4위	자궁경부암	10.1	자궁경부암	6.5	자궁암	6.4
5위	갑상선암	8.3	폐암	5.0	난소암	4.0
6위	폐암	6.6	난소암	3.7	자궁경부암	2.7

1) 자료 : Globocan 2000

Identity of Pap Smear

- Screening, not diagnostic tool
- Accuracy;
sensitivity 30-87%, specificity 86-100%
-Nanda K et al. *Ann Intern Med* 2000;132:810
- The means of normal result: residual risk of having developed cervical cancer over next 5 Year.

-Marteau et al. *BMJ* 2001;322:526

Pap Smear Performance

- 139 million female, ages of 15-75, 95 million, 50 million annual perform in USA.
- 33%(5,663 women). Pap smear during the last 2 years.

-Stoler MH. *Modern pathol* 2000;13:275

여성 건강 실태 조사(1998)

Pap Screening performance among the patients with Cervical Cancer

- 166 patients; >50%, never screened.
33%, inadequately screened.
-Shin et al *Kor J Obstet Gynecol* 1993;36:215
- 70 patients; 61% never, 19% inadequate.
-Nam et al. *Kor J Obstet Gynecol*. 2001;12:128
- 80% of the current incidence of and mortality from uterine cervical carcinoma in geographic area; underserved and unscreened.

-Schneider et al. *Acta* 2001;45:493

Indicators of Failing Cervical Cancer Screening

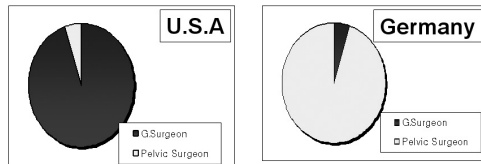
- Failure to reach women at risk
- Low coverage rate
- Large screening interval
- Inadequate follow-up abnormal smear
- Abnormally high false negative rate

-Miller AB. *Am J Public Health* 1995;85:761

Role of OB/GYN about Breast Disease . ACOG

- Patient education-involvement in surveillance
- Management of benign disease and symptom
- Early diagnosis of cancer
- Diagnostic resolution of all abnormalities
- Office diagnostic testing with scope and limit of training and expertise
- Surgical management within scope and limits of training and expertise

The Management of Breast cancer



BREAST CANCER STUDY

A STUDY OF ISSUES INVOLVING
THE DIAGNOSIS OF BREAST
CANCER THAT RESULT IN
MEDICAL MALPRACTICE CLAIMS

2002 Breast Cancer Study Major Findings

- More than 68% of the patients represented were under the age of 50.
- These claims account for 78% of reported indemnity.
- The average indemnity payment for claimants under 50 was 63% higher than for patients 50 and older.
- Just under 33% of claimants were under 40, accounting for 43% of reported indemnity.

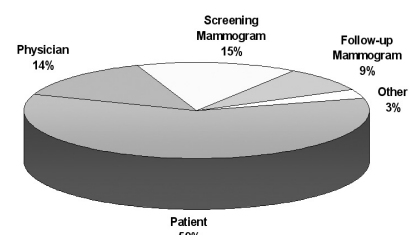
2002 Breast Cancer Study Leading Reasons for Delay

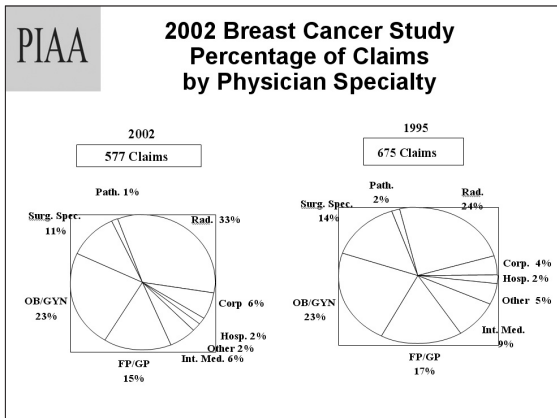
- 45% of cases involve a misread mammogram
- 43% reported that the findings of a physical exam failed to impress the provider
- 40% involved a negative mammogram report
- 36% failed to make a timely referral
- 28% involved a communication breakdown between providers
- more than one misadventure per case

2002 Breast Cancer Study Specialty Breakdown

Specialty	# Paid Claims	Average Indemnity
Radiology	191	\$337,090
OB/Gyn	134	\$366,189
FP/GP	86	\$204,516
Surgical Spec.	64	\$327,859
Corporation	37	\$264,518
Internal Medicine	36	\$246,538
Other	12	\$235,711
Hospital	9	\$131,175
Pathology	8	\$331,505

Who Discovered Lesion





2002 Breast Cancer Study Recommendations for Primary Care Physicians & OB/GYNS

- Do not abandon diagnostic pursuit because you are unimpressed by the physical findings.
- Perform a thorough breast exam on each female patient regardless of age or complaints.
- If a mass is palpated or suspected, additional studies must be done to rule out malignancy.
- Perform regular follow-up exams on patients who present w/ complications of the breast.

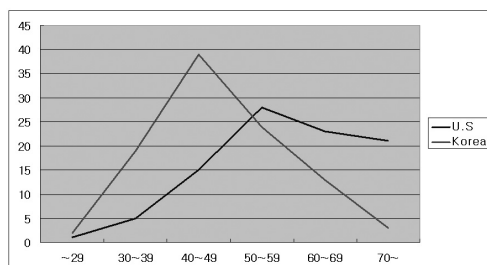
Importance of OB/GYN Involvement about Breast Cancer Detection

- Primary care role
- 52% of women consider OB/GYN, 1st care physician in U.S.A
- 80% of maternity care, OB/GYN

Breast Screening at OB. & Gyn. in Korea

- Main target; HRT, baseline, not screening with mammography.
- WHI and million women's studies.
- Age incidence in Korea.
- Ultrasonography, individual base

유방암 호발 연령



The Sensitivity of Mammography

- False negativity;
 - 1/4 of all invasive breast cancer in 40-49 year-olds,
 - 1/10 in 50-59
- False positivity;
 - 8-12%
 - More common in younger women,
 - Only half in 40-49,

Digital Mammography

- Increased positive predictive value than that of mammography
- Clear classification of BI-RADS
- Request standarization

- Berman CG. *Cancer Control*. 2007;.14(4):338-

The Role of Ultrasound in the Diagnosis of Breast Cancer

- Peak age incidence in Korea; age 40 to 50.
- Nonfatty breast : US imaging is more sensitive than mammography for invasive cancer, but involved risk of overestimation of tumor extent.

-Berg WA et al. *Radiology* 2004. 233(3):830-

- Pregnant, lactating and inserted prosthetic case
- <age 50, OB&GYN. In Korea, all in expert to the pelvic US
- Short learning curve

Breast Cancer Facts & Figures 2007-2008, I

- Mortality from breast cancer, dropped by more than 2% in each year in the USA since 1990, due to improvements in treatment and early detection.
- 3.3% annual decrease for women aged younger than 50 years, 2.0% for 50 years older
- Between 1996 and 2004, mortality among African-American women declined by just 1.6%. In 2004, 36% more likely to die than white women

Breast Cancer Facts & Figures 2007-2008, II

- Incidence increased by 3.7% between 1980-1987, attributes to an increase in mammographic screening.
- Between 1987 and 2001, increased slightly by 0.5%, possibly due to increased obesity and use of HRT.
- Between 2001 and 2004, 3.5% decrease, attribute to a decline in mammography screening and decreased in HRT use

Breast Cancer Facts & Figures 2007-2008, III

- In 2007, total of 178,480 women will be diagnosed with invasive cancer, and 40,460 women will die.
- The challenge; to close the gap so all Americans can reap the benefit equally, race or ethnicity or because of lack of access to quality care.

Essential Components of a Successful Program

- High coverage rate of population; >80%
- Screening at regular interval
- Well-trained medical care provider
- Efficient follow-up and treatment system

-Schneider et al. *Acta* 2001;45:493

Successful Screening Program

- Patient's (Client's) responsibility
- Care provider's responsibility
- Laboratory's responsibility
- Occasional vs. nationwide systemic organized program

Organized vs. Opportunistic Screening System

- | | |
|--|---|
| <ul style="list-style-type: none"> ■ Organized ■ Central coordination and data collection ■ Defined target population ■ Call & recall system ■ Defining screening intervals | <ul style="list-style-type: none"> ■ Opportunistic ■ No central data collection ■ Recruitment depends on the self-motivation of the participating population ■ Variable screening intervals ■ No coordinated effect between the client, clinician and laboratory |
|--|---|

—Miller AB et al. *Int J Cancer* 2000;86:440

—Schneider et al. *Acta* 2001;45:493

Suggested Measures to Improve Coverage

- Clear definition of the targeted population
- Establishment of a screening register for the define population
- Establishment of a call and recall system
- Initiation of a health education system to make the targeted population
- Provision of incentive for the provider

—Schneider et al. *Acta* 2001;45:493