Prevención Cuaternaria

Rastreamento do câncer de mama

Seminário Brasileiro de Prevenção Quaternária em Atenção Primária à Saúde
Curitiba

Miguel Pizzanelli, Uruguay
Médico de Familia e Comunidade

http://estancambiandolostiempos.blogspot.com/
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28 a 30 novembro 2013 / Promoção SBMFC e APRMFC

“one way to become sick is to start looking for something to be wrong”

H. Gilbert Welch

"Uma maneira de tornar-se doente é começar a procurar alguma coisa errada"

Cuando los resultados no son funcionales a los programas de prevención secundaria siempre alguien se molesta

El silencioso valor de la “literatura gris” en el desarrollo de pensamiento crítico.

Un poco de historia: el caso del panel de expertos del NCI

* HIP
* Edimburg 1979
* Suecia 280.000 mujeres

PERO

* Canadian National Breast Screening Srudy / NO demostró reducción de mortalidad.
* 1997 National Cancer Institute

Peter Gøtzsche

The Nordic Cochrane Centre

http://www.cochrane.dk/

Controversia internacional respecto a la pertinencia de los programas de detección precoz para cáncer de mama por medio de mamografía.

Gøtzsche P, Olsen O. Is screening for breast cancer with mammography justificable? Lancet 2000; 355:129-34.

Sobrediagnóstico

Se asume como un mal menor, un costo a pagar por un bien mayor que es el supuesto de “prevenir muerte por cáncer de mama”, “salvar vidas”;

¿pero es así?

Falsos Positivos

La tasa de falsos positivos depende de:

* Prueba o Test utilizado
* Características de la la población
* Calidad del proceso de rastreo
* Interpretación de los resultados

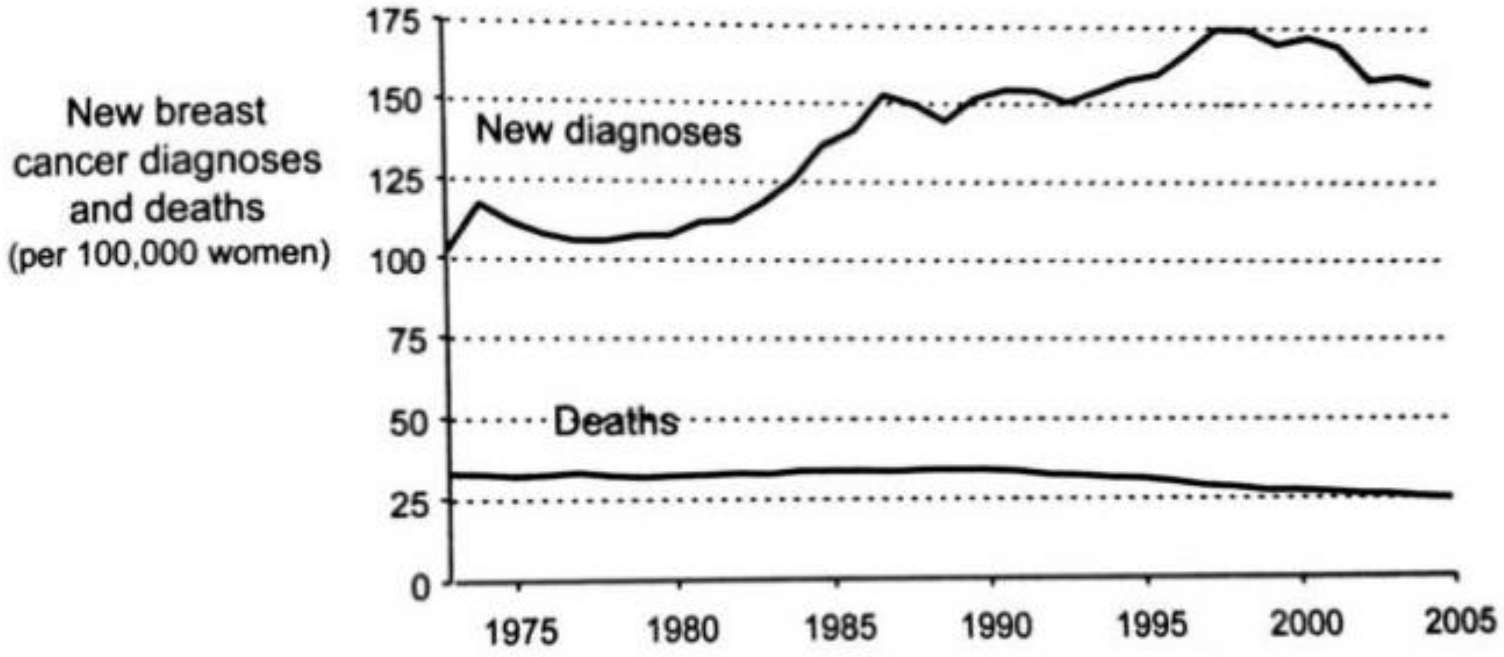
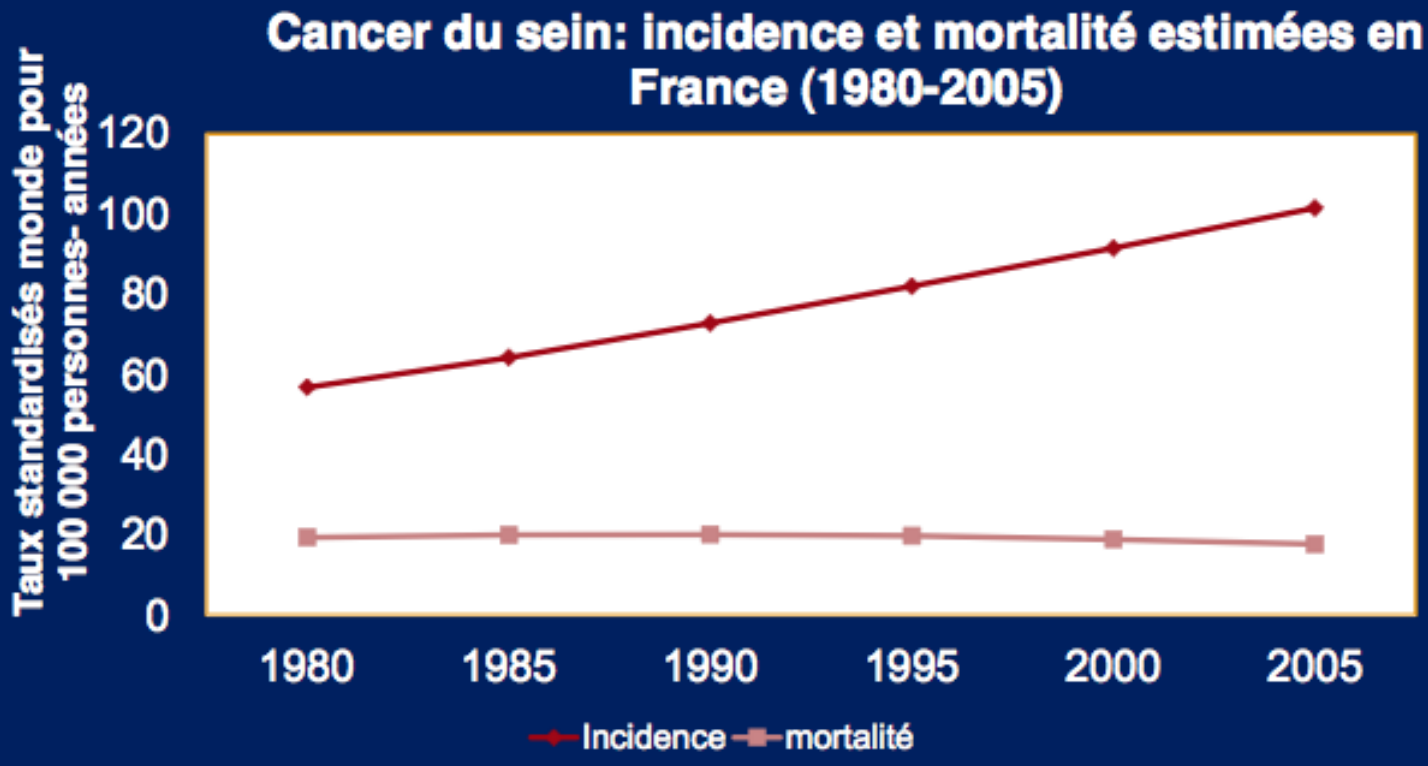


FIGURE 6.2 *New Diagnoses and Deaths from Breast Cancer in the United States, 1973–2005*

Welch HG. Overdiagnosed: Making People Sick in the Pursuit of Health 2012 .

Incidence constantly increasing with a stable mortality



Aurélien Belot, estimation nationale de l'incidence et de la mortalité par cancer en France entre 1980 et 2005, INVS

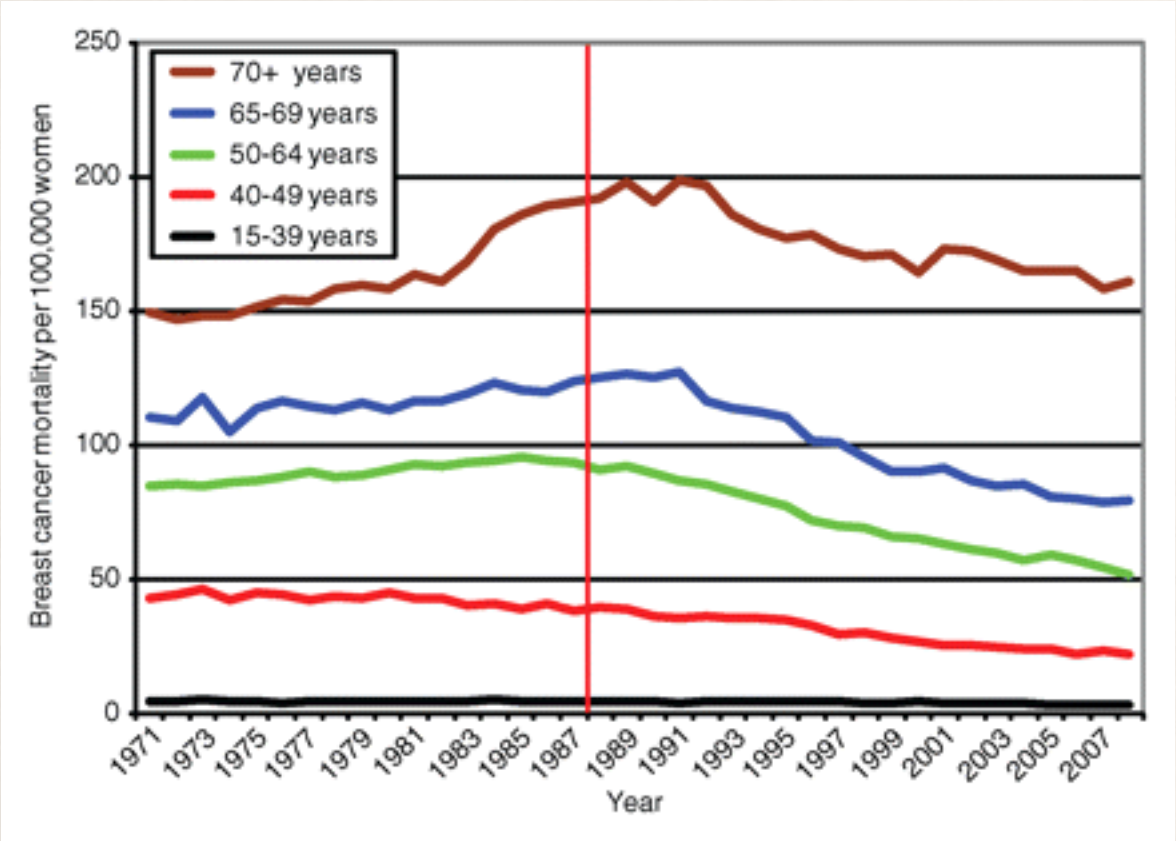
Is Mammographic Screening Justificable Considering Its Substantial Overdiagnosis Rate and Minor Effect on Mortality ?

Karsten Juhl Jørgensen, MD, John D. Keen, MD, MBA and Peter C. Gøtzsche, MD

From the Nordic Cochrane Centre, Rigshospitalet, Department 3343, University of Copenhagen, Blegdamsvej 9, DK-2100 Copenhagen, Denmark (K.J.J., P.C.G.); and Department of Radiology, John H. Stroger Jr Hospital of Cook County, Chicago, Ill (J.D.K.).

Radiology 2011

Disponible en: http://radiology.rsna.org/content/260/3/621.full.pdf+html



Graph shows breast cancer mortality rates in the United Kingdom from 1971 to 2008. The largest decrease is seen in women aged 40–49 years, who were not eligible for screening (decrease of 50% from the early 1980s). In women aged 50–64 years, screened from 1988, the decline began before screening was introduced in 1988 (vertical line)—long before an effect would be expected (decrease of 45% from mid-1980s)

Figure 1

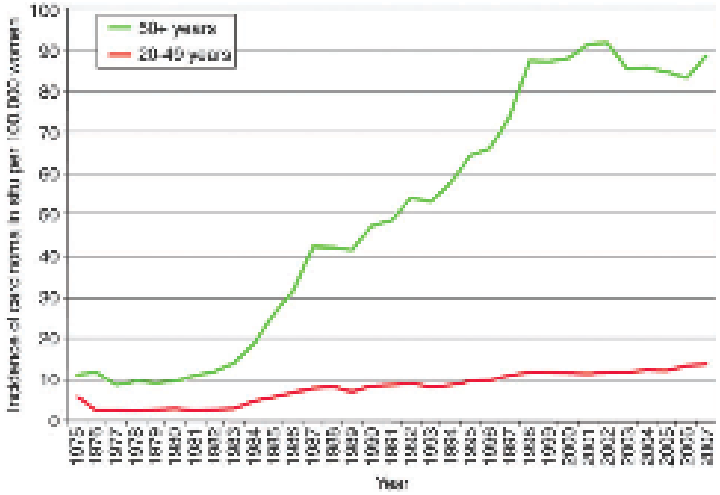


Figure 1: Graph shows age-adjusted incidence rates of DCIS in the United States from 1975 to 2007. Detection rates increased fourfold in women younger than 50 years and eightfold in women 50 years or older after screening became widespread in the mid-1980s (11).

Figure 2

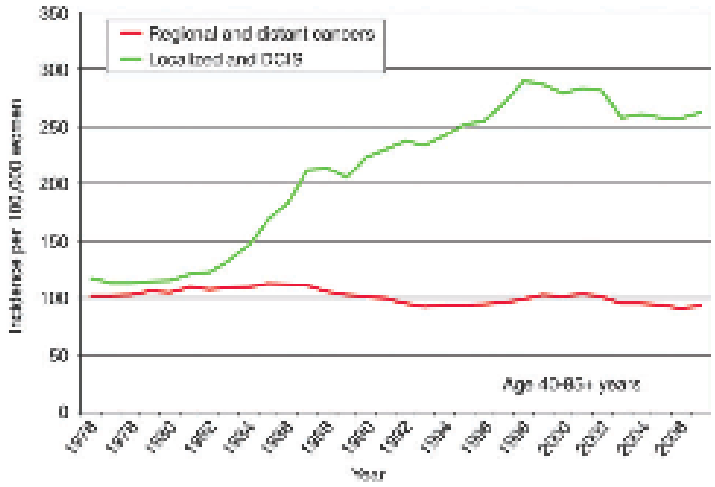
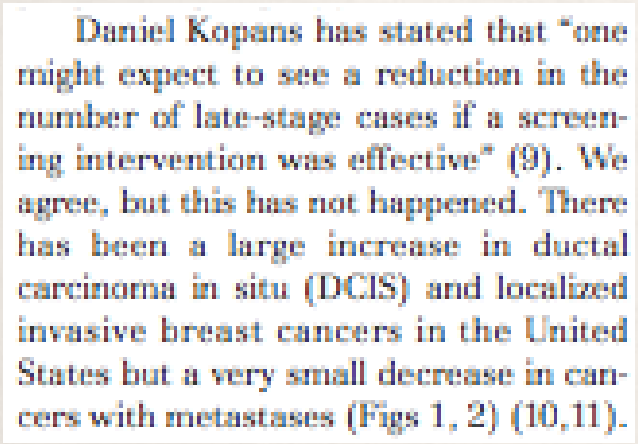


Figure 2: Graph shows age-adjusted incidence rates of metastatic (regional and distant) and nonmetastatic (DCIS and localized) breast cancers in the United States from 1976 to 2007. The small decline in metastatic cancers derives from regional cases, with no change for distant cases (not shown). It does not compensate for the large, persistent increases in nonmetastatic cancers. Localized and in situ cases each contribute to about half of the doubling in the incidence of nonmetastatic cases seen after screening started in the mid-1980s (11).

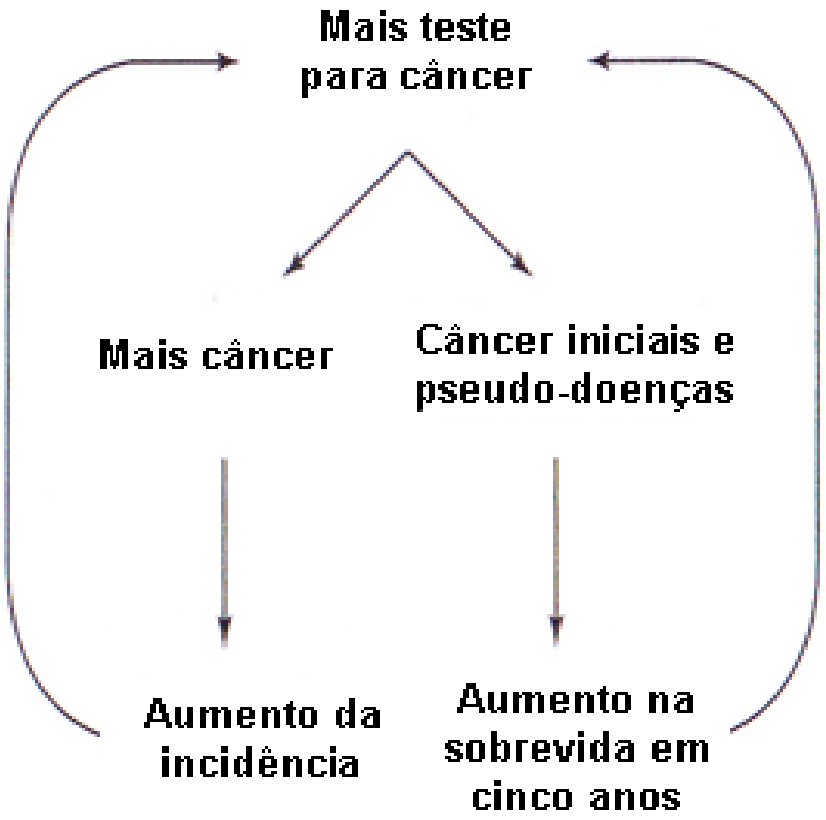
Se incrementó de forma importante la detección del carcinoma ductal in situ y del cáncer invasivo localizado pero muy leve disminución del cáncer invasivo con metástasis.



Daniel Kopans has stated that "one might expect to see a reduction in the number of late-stage cases if a screening intervention was effective" (9). We agree, but this has not happened. There has been a large increase in ductal carcinoma in situ (DCIS) and localized invasive breast cancers in the United States but a very small decrease in cancers with metastases (Figs 1, 2) (10,11).

Fuente: Is Mammographic Screening Justificable Considering Its Substantial Overdiagnosis Rate and Minor Effect on Mortality ?

Efeito dos Vieses



Interpretação padrão:

Tem mais caso câncer acontecendo!

Interpretação padrão:

O tratamento está melhorando!

Autorización de uso por gentilez a de Armando Norma n/ Fuente: Should I be tested for cancer? HG Welch

Muchas empresas ofrecen tamizajes agresivos a población sana y así crean nuevos clientes

One of the best ways to identify potential patients is to aggresively screen a population for disease.

Welhc H G / Should I be tested for cancer?

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Private health screening: why bother?

Neurotic about her health, our writer went for a private 'health MOT' - and wished she hadn't

Testing, testing...: did private screening find anything wrong with health wi

More From The Web

More From The Web

Yet according to some doctors, many of the tests I had are a waste of time, or worse. The carotid artery scan is particularly ill-advised, according to Margaret McCartney, a Glasgow-based GP who says that private screening companies are exploiting people's health worries without explaining the downside of some tests.

“the more times you are screened the more likely you are to have false positive exam”

H. Gilbert Welch

“Quanto mais você é submetido a rastreamento, mais propenso você estará a ter um exame falso positivo”

ejemplo

Supongamos que el promedio de falso positivo para un test es 10%

La chance de NO tener falso + es 90%

Luego de 2 test consecutivos es:

90 % x 90 % = 81 %

19% de tener falso +

Fuente: Welch H G. Should I be tested for cancer?

¿pero si aplicamos 10 años de screening?

90x90x90x90x90x90x90x90x90x90

35 %

la chance de tener un falso + luego de 10 años es 100 – 35 = 65%

Fuente: Welch H G. Should I be tested for cancer?

Risco cumulativo de um ou mais testes falsos positivos em um programa de rastreio de 10 anos

	Chance de ter um falso positivo pelo menos ao longo de dez anos de rastreamento		
taxa de falsos positivos	cada ano	bienalmente	cada três anos
1%	10%	5%	3%
2%	18%	10%	6%
3%	26%	14%	9%
5%	40%	23%	14%
10%	65%	41%	27%

Fuente: Welch H G. Should I be tested for cancer?

Falsos Positivos

Si se hacen cinco mamografías consecutivas en un programa de cribado cada 2 años, hasta la mitad (50%) de las mujeres pueden tener un falso positivo.

Fuente: Gérvas J, Pérez Fernández M. Sano y salvo (y libre de intervenciones médicas innecesarias)

Falsos negativos

2 de cada 1000 mujeres que se realizan mamografías de cribado tienen cáncer de mama y no son diagnosticadas.

Fuente: Gérvas J, Pérez Fernández M. Sano y salvo (y libre de intervenciones médicas innecesarias)

Harding Center for Risk Literacy

Breast Cancer Early Detection

HARDING CENTER FOR RISK LITERACY

by mammography screening

Numbers for women aged 50 years or older who participated in screening for 10 years

	2,000 women without screening	2,000 women with screening
Benefits		
How many women died from breast cancer?	8	7*
How many women died from all types of cancer?	43	43
Harms		
How frequent were false diagnoses, often associated with months of waiting for all-clear?	–	200
How many women were additionally diagnosed and operated** for breast cancer?	–	10

* This means that about 7 out of 2,000 women (50+ years of age) with screening died from breast cancer within 10 years – one less than without screening.

** Complete or partial breast removal

Source: Gøtzsche, PC, Nielsen, M (2011). *Cochrane database of systematic reviews* (1): CD001877.
Where no data for women above 50 years of age are available, numbers refer to women above 40 years of age.

Fuente: http://www.harding-center.com/index.php/en/what-you-should-know/facts-boxes/mammography

Sobrevida a 5 años

Sobrevida a los 5 años = 400/1000 = 40%

Sobrevida a 5 años luego de screening

Sobrevida a los 5 años = 1400/2000 = 70%

La agenda preventiva conspira contra la agenda curativa consumiendo recursos.

Hart JT. The Inverse Care Law. Lancet 1971

Referencias bibliográficas

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