

## 症例 4

### 家族性乳癌 手術術式について

#### 症例

- ◆ 29歳、閉経前、右乳癌（T1, N1, M0 stage I）
- ◆ MRでT=1.5cm、温存可能
- ◆ 生検：IDC ER（2）PgR陰性 HER（1+）
- ◆ 家族歴：**母35歳**→乳癌死、  
**姉32歳** OPE
- ◆ →家族性乳癌の定義に当てはまる

## (B) 温存手術をすすめる

- ◆ 遺伝変異をもつキャリアか？
- ◆ キャリアであった場合、ハイリスク乳腺を残し、補助療法なしであれば残存乳房内再発の可能性は高い。→RT追加した場合は？

- ◆ 日本では家族性乳癌の26.3%にBRCA1/2変異<sup>1)</sup>
- ◆ 本症例でBRCA陽性率は39.4%と予測できる<sup>2)</sup>
- ◆ →それ以外はBRCAの遺伝変異による単一遺伝子病による乳癌と言えない。

(家族歴のある乳癌の多くは複数の遺伝的要因と環境要因の組み合わせによる多因子遺伝病)

## 家族歴からBRCA陽性率

Family history within second-degree relatives						
Breast and/or ovarian cancer at any age		Yes				No
Breast cancer <50 years of age in ≥ one relative		No	Yes	No	Yes	
Ovarian cancer at any age		No	No	Yes	Yes	
Proband's personal history	Breast cancer ≥50 years of age	I-1	II-1	II-4	II-7	
	Breast cancer <50 years of age	I-2	II-2	II-5	IV-3	
	Ovarian cancer at any age, No breast cancer	I-3	II-3	II-6	IV-4	
	Breast cancer and ovarian cancer at any age	III	IV-1	IV-2	IV-5	V-5
	Male breast cancer at any age	V-1	V-2	V-3	V-4	V-6

Group I (64/828 7.7%)\*    Group II (364/1709 21.3%)  
 Group III (10/52 19.2%)    Group IV (205/421 48.7%)    Group V

日本人で39.4%

Fig. 1. Classification and grouping of the enrolled subjects. \*Numbers in parentheses indicate prevalence of *BRCA1/2* mutations reported in non-Ashkenazi individuals in the US.<sup>(6)</sup>

米国で既往歴と第二度近親者以内の家族歴から Group I ~ V までに分類し、BRCA1/2陽性率を推定

→日本人135例で陽性率を算出

Group II で28.0%

Group II - 2 で39.4%

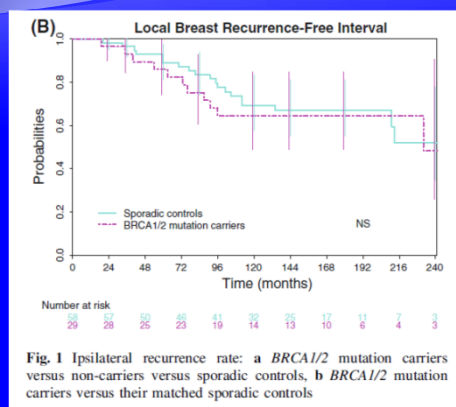
→それ以外は単一遺伝子疾患と言い難く  
通常の治療選択でいい

## BRCA変異があった場合の問題点

Highrisk乳腺を残しても大丈夫か？

＊ 残存乳房内再発は術後放射線療法の追加した場合の予後

## 局所再発：BRCA変異の有無で差はない



Is the breast-conserving treatment with radiotherapy appropriate in *BRCA1/2* mutation carriers? Long-term results and review of the literature : *Breast Cancer Res*(2010)

## OS:BRCA変異有無で差はない

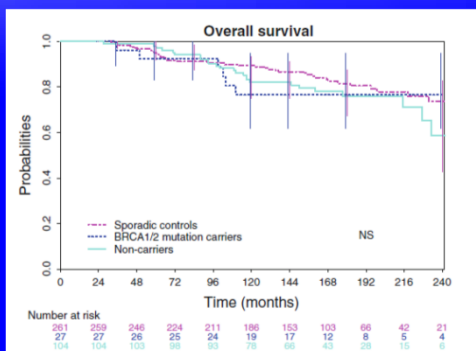


Fig. 3 Overall survival in BRCA1/2 mutation carriers versus non-carriers versus sporadic controls

## 術式によるOSの差はない

BRCA変異のある655例で術式の違いで検討  
術後補助療法（放射線治療や薬物療法）を含む

### Breast Cancer-Specific Survival and Overall Survival

No significant difference in breast-cancer specific or overall survival was observed by local treatment type. Breast cancer-specific survivals with BCT were 93.6% and 91.7% at 10 and 15 years vs. 93.5% and 92.8% with M ( $p=0.85$ ). Overall survivals with BCT group were 92.1% and 87.3% at 10 and 15 years and 91.8% and 89.8% with M ( $p=0.73$ ). Factors significantly associated with breast cancer-specific mortality were presence of an infiltrating lobular cancer (HR 4.3;  $p=0.01$ ) and the development of a CBC (HR 2.5,  $p=0.02$ ). For overall survival analyses, since mortality is known to be related to patient age, models were adjusted for patient age at time of diagnosis. The only factor significantly related to increased rates of death on multivariate analysis was the development of ovarian cancer (HR 5.0,  $p=0.0001$ ).

Local Therapy in BRCA1 and BRCA2 Mutation Carriers with Operable Breast Cancer: Comparison of Breast Conservation and Mastectomy : *Breast Cancer Res Treat.* 2010 June ; 121(2):

## 乳房切除術＋再建のデメリット

医療費の増大

長期入院（温存手術に比べて）

手術時のリスク（長時間手術、出血、疼痛）

美容的問題（再建でも創は大きい）

腹直筋再建→妊娠のrisk

長期的な再建後の成績はまだはっきりしない。

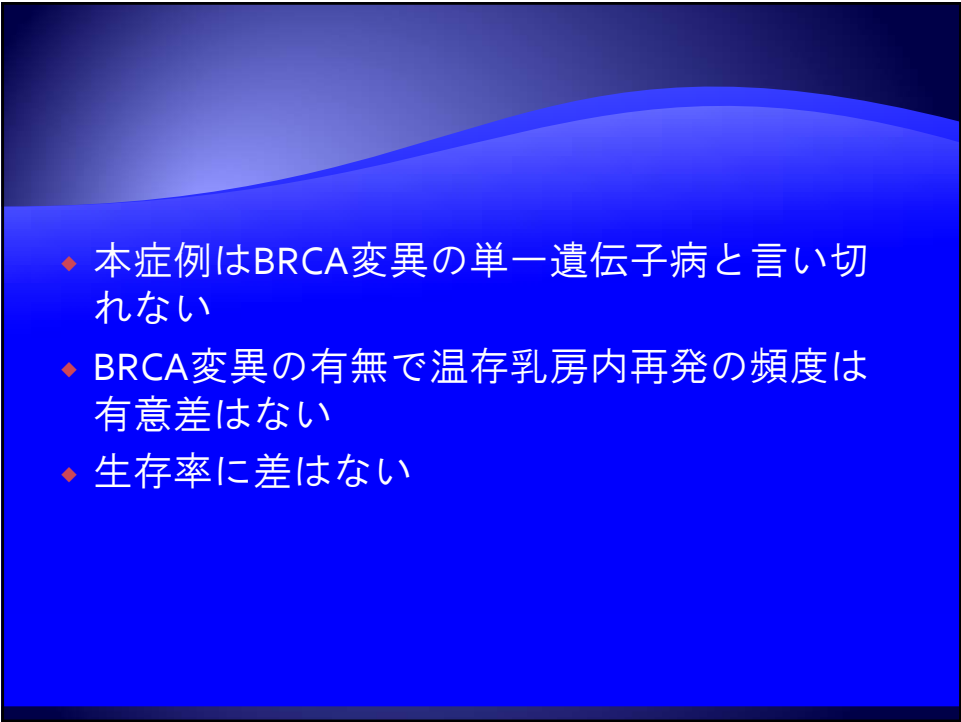
いずれの術式であっても術後補助薬物療法は  
行う必要がある

## まとめ

- ◆ 本症例はBRCA変異の単一遺伝子病と言い切れない
- ◆ BRCA変異の有無で温存乳房内再発の頻度は有意差はない
- ◆ 生存率に差はない

- 1 ) SuganoK:Cross-Sectional analysis of germline *BRCA1/2* mutations in Japanese Can Sci 2008
- 2 ) Cross-sectional analysis of germline *BRCA1* and *BRCA2* mutations in Japanese patients suspected to have hereditary breast/ovarian cancer 2008

最終弁論

- 
- ◆ 本症例はBRCA変異の単一遺伝子病と言い切れない
  - ◆ BRCA変異の有無で温存乳房内再発の頻度は有意差はない
  - ◆ 生存率に差はない