

# 日本語要約

- ◎ 他院で治療法がないとして紹介された末期直前の卵巣癌に対する化学療法、温熱療法、高気圧酸素治療による集学的治療の成果
- ◎ 67%の症例で、治療に対する奏効あり
- ◎ 当院受診後の中間生存期間は18ヶ月、3年生存率は23%
- ◎ 治療法がないと診断された症例に対しても、集学的治療による良好な治療成績が証明された

# Chemo-hyperthermia for pre-end stage recurrent ovarian cancer

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# Backgrounds

- Efficacy of chemotherapy for the ovarian cancer is generally high and survival period is relatively long.
- But in the pre-end stage after resistant for all anti-cancer agents, there is little effective therapy.
- We investigated the effectiveness of chemohyperthermia (HT) for refractory re-end stage recurrent ovarian cancer.

# Materials

- 13 patients with post-operative ovarian cancer
- All patients were informed no effective treatment in the other hospital.
- Age:  $54.5 \pm 10.4$
- Radiotherapy (RT): 8 cases (67%)
- Chemotherapy: all patients
- 8 MHz radiofrequency-capacitive regional hyperthermia and hyperbaric oxygen therapy were simultaneous used.

# Chemotherapy

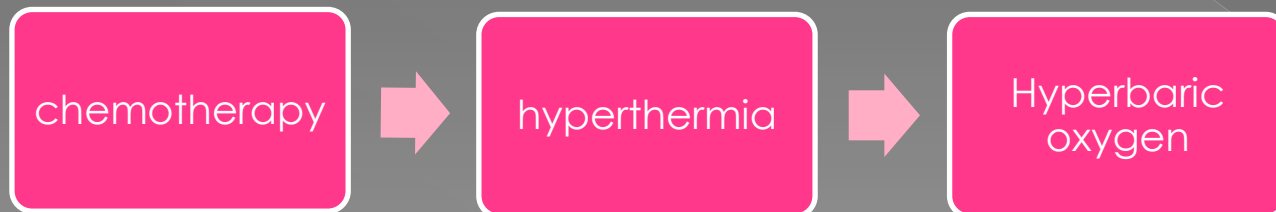
regimen	No of cases	rate
PAC/CBDCA	6/13	46%
PAC	2/13	15%
PAC/CDGP	1/13	8%
CPT-11/MMC	1/13	8%
DOC	1/13	8%
DOC/CDGP	1/13	8%
CDGP	1/13	8%

# Hyperthermia

- All patients were received.
- Session:  $31.4 \pm 23.4$
- 8 MHz radiofrequency-capacitive regional hyperthermia (Thermotron RF-8)
- Heating location: lung, liver, pelvis, peritoneum (focus to main tumor )
- time: 50min
- Schedule: just after chemotherapy or during chemotherapy

# Hyperbaric oxygen

- All patients were received.
- Session:  $22.2 \pm 23.2$
- Chamber (Sechrist Industries Inc., model 2800 J, Anaheim, California) pressured with 100% oxygen to 2.0 atmospheres absolute
- Time: 90min
- Schedule: just after chemo-hyperthermia



# Table 1: Response rate

Response	No. of cases	Rate
CR	2/12	17%
PR	6/12	50%
SD	1/12	8%
PD	4/12	33%
CR+PR	8/12	67%



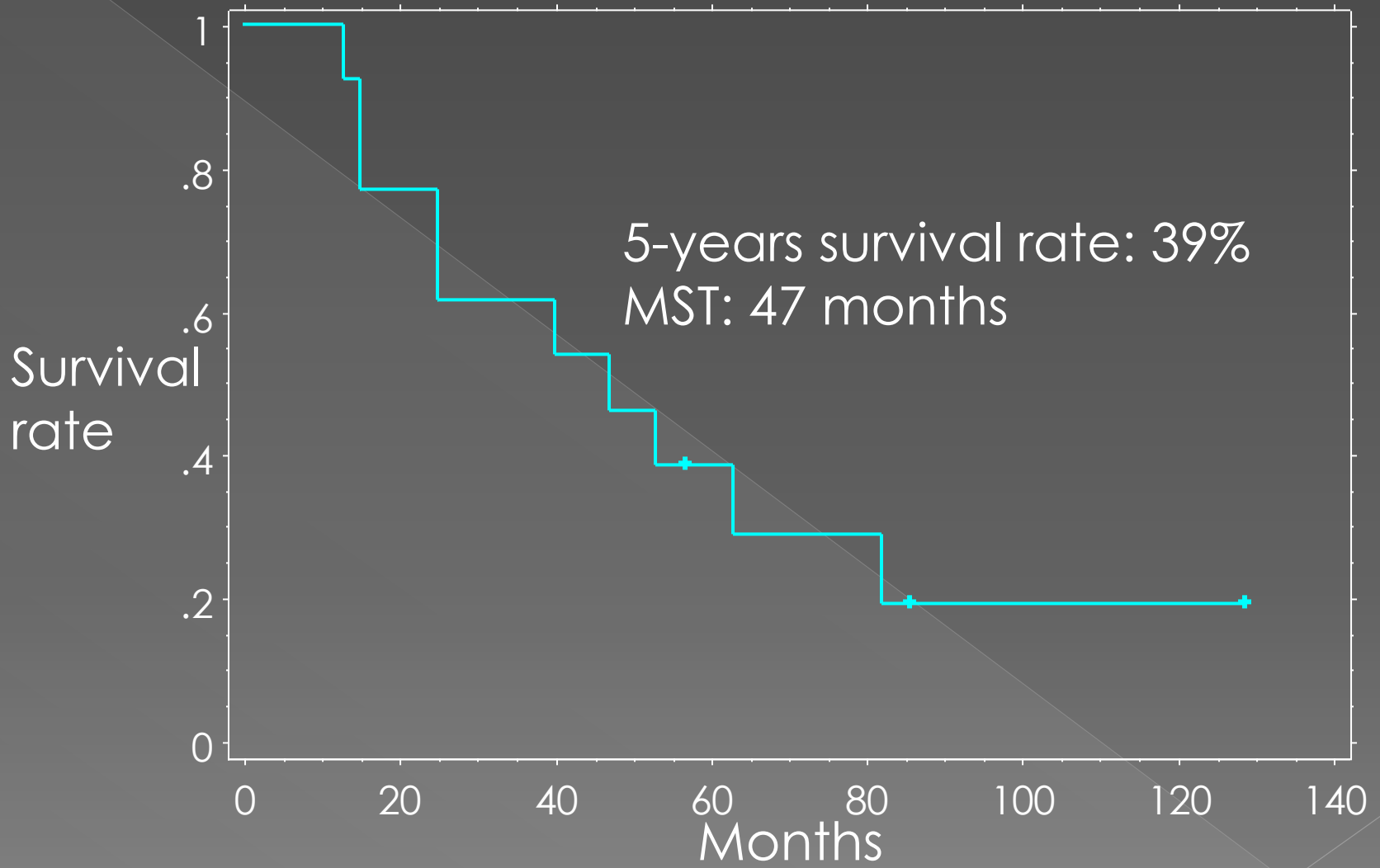


Fig. 1: Overall survival of all patients after initial treatment

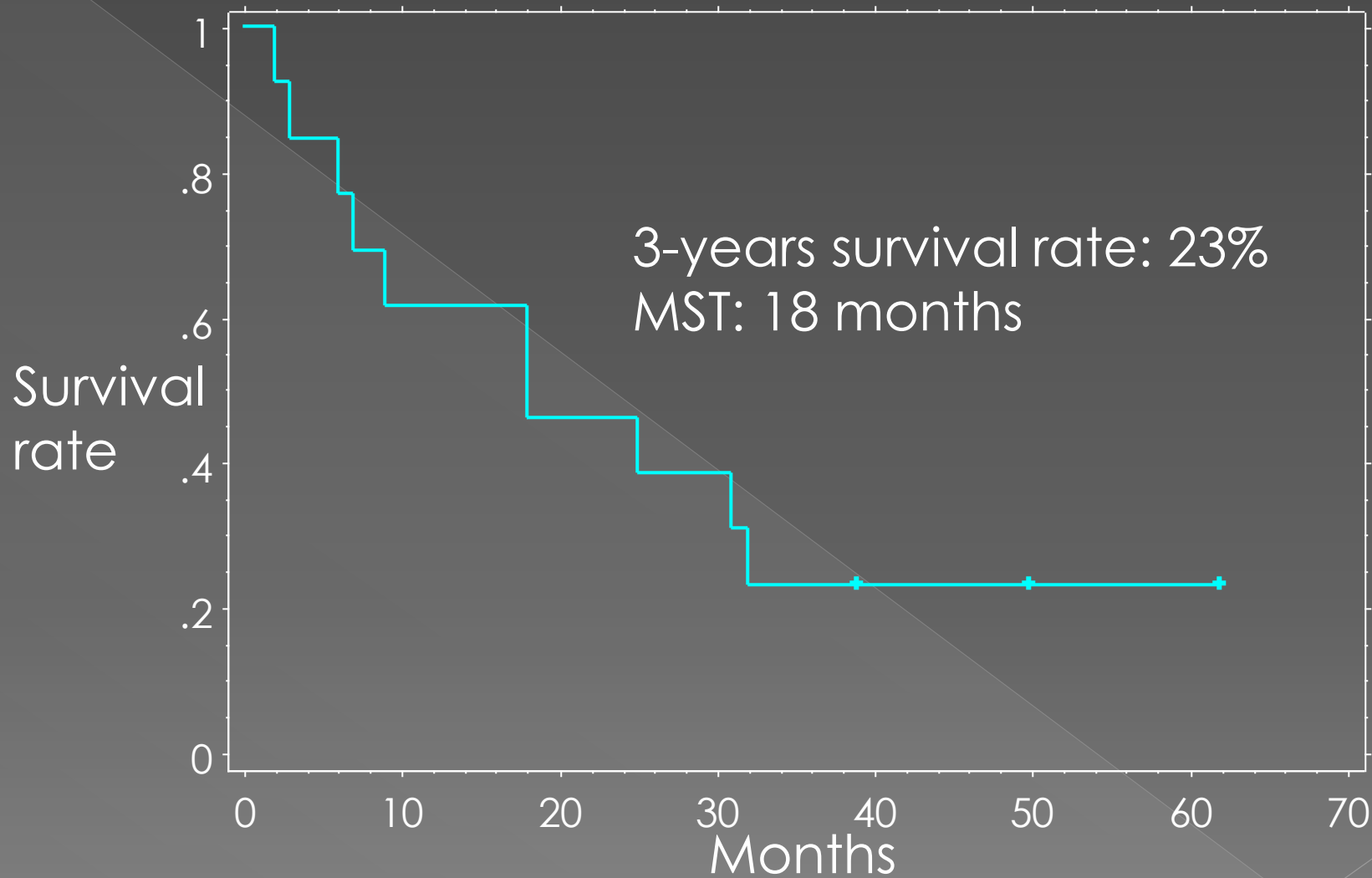


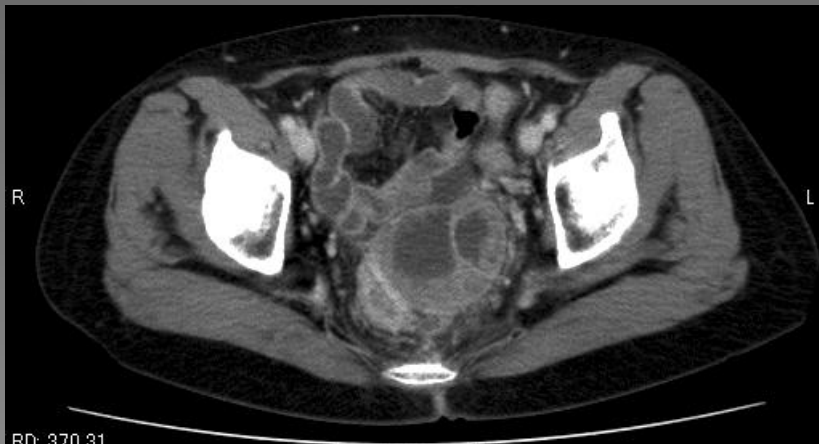
Fig. 2: Overall survival of all patients after treatment of our hospital

# Results

- ◉ More than half patients showed good responses: 2 CR, 6 PR, 1 SD, and 4 PD (Table 1).
- ◉ Median survival time (including in pre-therapy) was 46.8 months (Fig. 1).
- ◉ Median survival time (after our treatment) was 18 months (Fig. 2).
- ◉ A case of CR lives more than 5 years with disease free is shown.

# Case: 50's female

- 2005/2 Ovarian ca. (stage IV ), neo-adjuvant chemotherapy (PAC/CBDCA)  
2005/6 Operation, adjuvant chemotherapy (PAC/CBDCA)  
2006/4 Relapse in pelvic space  
2006/5 DOC/CBDCA→CPT-11/CDDP→VP16/CBDCA→  
PAC/CBDCA→VP-16/CBDCA→ADM/CPA  
2007/4 Evaluation of all these regimen: PD  
2007/3 Start of our treatment  
Radiotherapy (60Gy)  
Chemotherapy (weekly PAC/CBDCA)  
Hyperthermia and hyperbaric oxygen therapy  
2012/8 CR was kept up to now.



Pretreatment



At present

# Discussions

- Though efficacy of chemotherapy for the ovarian cancer is generally high, drug resistance leads to a difficult clinical situation. Generally, no effective regimens were remained at the pre-end stage of recurrent ovarian cancer.
- In these cases, we have experienced the revival of effectiveness of past used regimen by combination with HT, HBO and/or RT. High local response rate of 67% in these condition may suggest the synergistic effect of combination therapy.

# Conclusion

- It was indicated that the multidisciplinary therapy including with chemotherapy, HT, HBO and/or RT was remarkably available for localized lesion of recurrent or residual ovarian cancer.