CASE REPORT:
"Managing complex cases of multiple metastases"

Samsung Medical Center

- 51 year old female with history of ovarian cancer
- 2013: Patient underwent hysterectomy and salpingo-oophorectomy
- 2016: Patient experienced headache and nausea
  → MRI scan confirmed 2 metastatic tumors
OVERVIEW

• Two metastatic tumors
  - The larger tumor about 34 mm in size in its largest dimension (volume of 13.7 cc)

• Gamma Knife radiosurgery was chosen over WBRT and open surgery in order to safeguard the patient’s cognitive function and to avoid the risks associated with open surgery on targets close to critical structures.
Each target was treated with a dose of 8 Gy/50% once a day for three consecutive days.

Both tumors were treated with a total dose of 24 Gy.
Larger tumor’s volume reduction after 6 months

94%

3 months
Tumor volume: 1.4 cc

6 months
Tumor volume: 0.8 cc

Smaller tumor not visible at neither 3 nor 6 months

Total tumor reduction
100%
Concluding remarks
Effective management of complex cases of multiple brain metastases

• A patient with a large metastatic tumor close to critical structures without severe neurological symptoms is a difficult case in terms of choice of treatment modality

• The ability to safely fractionate Leksell Gamma Knife Icon radiosurgery is useful in certain cases

• In this specific case, fractionated Leksell Gamma Knife Icon radiosurgery enabled substantial tumor reduction without any side effects.