Approach to Superior Sulcus Tumors

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Disclosure slide

I have no potential conflict of interest to report regarding this presentation
Outline

• The “not too distant” history
• The concept of combined therapy
• Surgical approaches
Historical Perspectives

< 1954

… were considered radioresistant and not subject to surgical removal, hence 100% fatal…

Herbert et al: Arch Pathol 1946
Historical Perspectives

1954

“Radiation management of otherwise hopeless thoracic neoplasm”

1st long term survivor (34 m) with radiation alone

Haas et al: JAMA 1954
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1956

“Accidental” induction RT=> 3 wks => surgery

• The resection was easy
• The periphery of tumor was dead but the core was alive
• Uneventful surgery and recovery…

Historical Perspectives

1975

Induction RT 30 Gy (12*) => 3 wks => surgery

N = 61 in 19 yrs
35% alive at 5 y

SWOG 9416

T3N0-1 or T4N0-1 NSCLC involving the superior sulcus
Mediastinoscopy negative

Cisplatin 50 mg/M2 d1,8,29,36
Etoposide 50 mg/M2 d1-5,29-33
Concurrent Thoracic RT - 4500 cGy

↓

Surgical Resection

↓

Two further cycles of Cisplatin + Etoposide
Southwest Oncology Group Study S9416

Overall Survival
All Eligible Patients with Follow-Up

Combined Modality Induction

N: 110  Deaths: 38  Median in Months: Not Reached
Pancoast Tumors

< 1954  100% fatal  2015  60% / 4y

Importance of clinical trial efforts …
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Surgical Approaches

Classic high postero-lateral approach (Shaw-Paulson)
Surgical Approaches

The anterior trans clavicular approach
T4 Vertebral Body
11 years post op (2. 2015)
Conclusions

Significant improvements in imaging and surgical techniques, as well the incorporation of combined modality treatments have allowed major improvement in the outcome of this subset of patients with locally advanced disease. A cohort of patients that were deemed hopeless 50 years ago!

Let’s review the data…