



Oral late effects and taste function in long-term survivors after treatment of medulloblastoma and supratentorial primitive neuroectodermal tumor during childhood or adolescence

-Preliminary results

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2018
28-30 JUNE
VIENNA

MASCC/ISOO
ANNUAL MEETING
SUPPORTIVE CARE IN CANCER

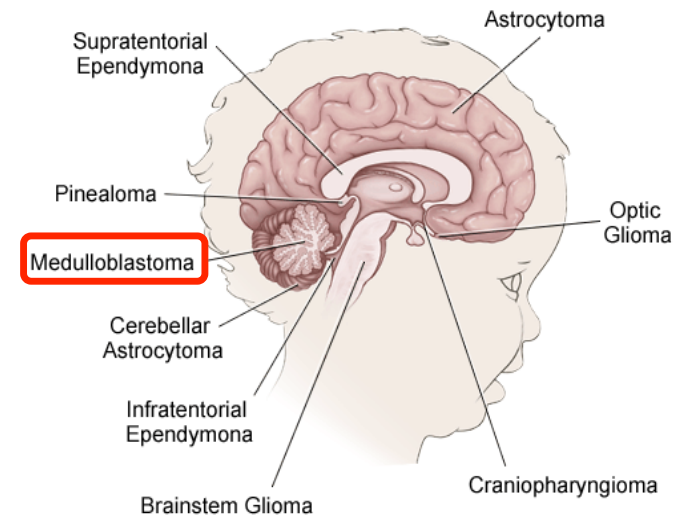


Faculty Disclosure

X	No, nothing to disclose
	Yes, please specify:

Background

- Annually 5/100 000 children (<19 years), diagnosed with brain tumors in Norway (5.2 mill)
 - 15-20 % medulloblastoma
 - 7 % supratentorial primitive neuroectodermal tumor (CNS-PNET)
- Treatment modalities
 - surgery, chemotherapy and/or radiotherapy
 - rarely radiotherapy to patients <3 yrs due to high risk of neurocognitive developmental disorders





Aim

- to investigate oral late effects in long term survivors (LTS) after treatment of medulloblastoma and CNS-PNET as part of a multidisciplinary study at Oslo University Hospital (OUH)

Subjects

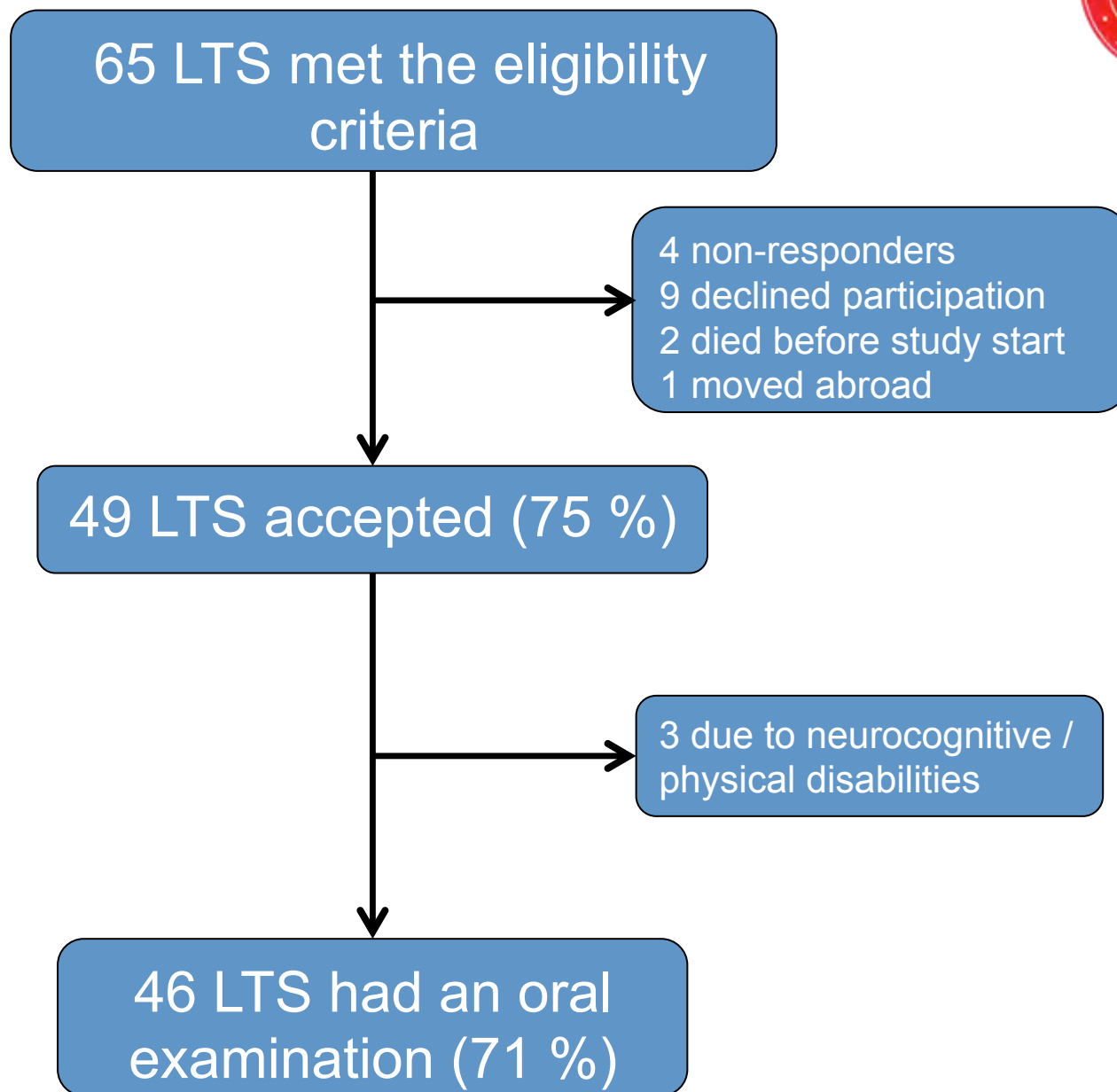
- 65 LTS treated between 1974 – 2013 were invited to participate
- Eligibility criteria
 - treated before the age of 20 yrs
 - minimum 2 yrs observation time

Methods

- Interview and oral examination
- Test of taste and smell function
 - «Burghart» Sniffin' Sticks and taste strips
- Bitewing and panoramic radiographs
- Clinical photographs



Results



Subject characteristics (n=46)



Females (n)	23 (50%)
Age; start of treatment, mean (range)	8 yrs (0.75-19)
Age; oral examination, mean (range)	27 yrs (5-52)
Follow-up time, mean (range)	19 yrs (3-40)
Radiotherapy; yes	39 (85%)

Trismus

Def. Maximal Incisal Opening (MIO) ≤ 35 mm

- 14/46 (30%)
- Median(range)
41 mm (16-55)
- LTS with MIO ≤ 35 mm
 - 9/14 (64%) treated ≤ 5 yrs
 - 13/14 (93%) treated with radiotherapy



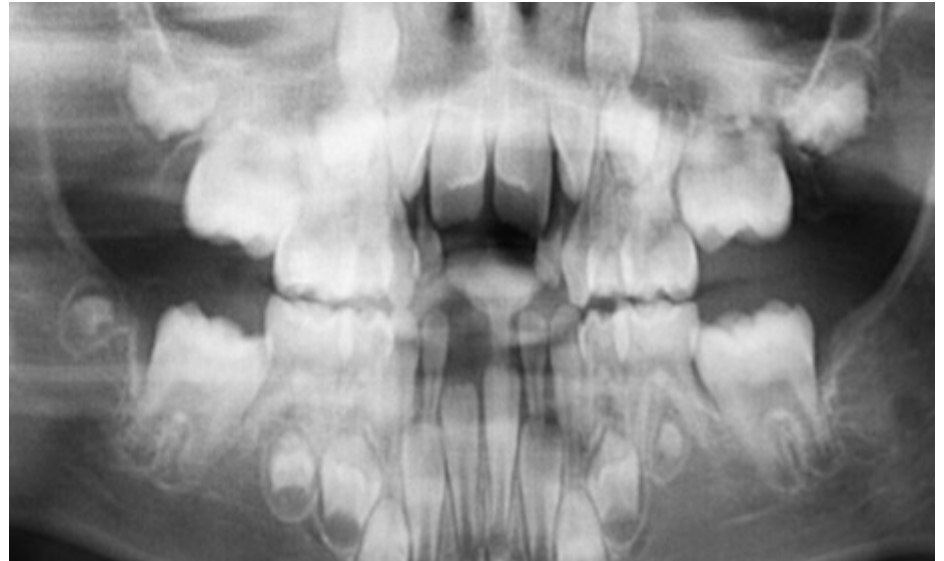
Taste disturbances (n=41)

- 16 (39 %) had taste disturbances
- 7 (17%) ageusia
- 9 (22%) hypogeusia



Dental developmental disturbances*

- 13 of the 17 subjects (76%) treated ≤ 5 yrs
- Hypodontia: 10
- Microdontia: 6
- Hypoplasia: 4



* Based only on clinical examination. Third molars were excluded.



Conclusion

The preliminary results indicate that LTS after treatment of MB/CNS-PNET may experience several oral side effects, including trismus, dental developmental disturbances and reduced taste function. This may impact their oral health negatively.