

TASTE & SMELL ABNORMALITIES IN TREATMENT-NAIVE CANCER PATIENTS: OBJECTIVE AND SUBJECTIVE ASSESSMENT



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BACKGROUND

- Taste and smell abnormalities (TSA) in cancer are common, distressing and under-reported
- The impact of TSA on nutritional status is not well recognised
- Subjective TSA reported in 49% of treatment-naïve cancer patients¹
- Objective measures may enhance assessment

AIMS

The study aimed to

- Assess the characteristics, prevalence and severity of TSA in treatment-naïve cancer patients
- Compare objective and subjective results
- Examine the relationship between TSA and nutritional status and symptom frequency

METHODS

- Prospective observational study
- Consecutive convenience sampling of radiation oncology outpatients June–October 2016
- Taste & Smell evaluated: (i) Taste and Smell Survey² (TSS), (ii) 'Sniffin' Sticks Olfactory Test[®] (SSOT), (iii) Burghart Taste Strips[®] (BTS)
- Nutritional status and symptoms assessed: Abridged Patient-Generated Subjective Global Assessment³ (abPG-SGA)

RESULTS

POPULATION

- Thirty (27 females) recruited
- Mean age: 54
- Median ECOG: 1(range 0-3)

OBJECTIVE ASSESSMENT

- 10/30 (33%) had taste and/or smell abnormalities (7 taste & 8 smell)

SUBJECTIVE ASSESSMENT

- 17/30 (56%) reported at least one subjective taste or smell change since becoming ill

COMBINED ASSESSMENT

- 22/30 (73%) had either subjective or objective taste or smell abnormality

TASTE

- 3/7 with objective taste abnormality reported no subjective taste change
- 4 had both subjective and objective taste abnormalities

SMELL

- 5/8 with objective smell abnormality reported no subjective smell change
- 2 has both subjective and objective smell abnormalities

SUBJECTIVE ABNORMALITY	N =17
Taste & Smell Change(s)	8
Taste Change only	8
Smell Change only	1
Bad Taste Present	12/17
Never	4
Rarely	4
Sometimes	6
Often	3
Bad Taste Characteristic	
Bitter	4
Salty	2
Sour	2
Sweet	1
Metallic	2
Other	1
Change in Taste Perception	10/17
Bitter	3 stronger, 1 weaker
Salty	1 stronger, 4 weaker
Sour	1 stronger, 1 weaker
Sweet	4 stronger, 4 weaker
Change in Smell Perception	7/17
Smell stronger	5
Smell weaker	2
Impact of Smell Change	
Insignificant	2
Mild	0
Moderate	3
Severe	2

OBJECTIVE ASSESSMENT	Subjective N =17	No Complaint N =13
Sniffin Test Abnormality	3/17	5/13
Hyposomia	2	5
Anosomia	1	0
Taste Test Abnormality	4/17	3/13
Bitter	3	2
Salty	2	2
Sour	2	2
Sweet	1	1

NUTRITIONAL STATUS

- 16/30 (54%) were at risk of malnutrition (abPG-SGA score ≥ 6), of whom 12 (75%) had TSA
- There was no statistically significant difference in risk of malnutrition between those with and without TSA

NUTRITIONAL STATUS	Subjective N=17	Subjective & Objective N= 22	No complaint N =8
Weight loss > 2%/6 mths	4/17	6/22	3/8
Eat less last month	7/17	8/22	2/8
Symptoms			
No Appetite	7/17	7/22	3/8
Pain	7/17	7/22	1/8
Fatigue	6/17	7/22	2/8
Dry Mouth	4/17	4/22	-
Nausea	4/17	4/22	-
aPG SGA Score >5	11/17	12/22	4/8

CONCLUSIONS

1. Most participants had subjective and/or objective TSA before treatment
2. Subjective and objective results were in accordance in 30% with TSA
3. Participants with TSA were more likely to be at risk of malnutrition
4. Further research into TSA and assessment instruments required

REFERENCES

1. Spotten et al. (2016)
2. Modified from Heald et al.(1998)
3. Gabrielson (2013)