Pilot Study of Subjective Taste and Smell Changes in Treatment-Naïve Patients with Solid Tumours

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TASTE AND SMELL CHANGES (TSCs)

- Frequent in cancer
- Mostly studied:
  - Post chemotherapy (CT)
  - Post radiotherapy (RT)
  - Head and neck (H&N) cancer
- May occur pre-treatment in diverse cancer sites
- Mechanisms poorly understood
- May be part of a symptom cluster
- Can affect nutritional status

AIM AND OBJECTIVES

Aim
To examine the prevalence, severity and characteristics of TSCs in non-H&N cancer patients pre-CT or RT

Objectives
To investigate the association between:
- Tumour type and TSCs
- Demographics and TSCs
- TSCs and nutritional risk
- TSCs and other nutrition impact symptoms

RESULTS

Demographics
- 53% male (n=23)
- Median age 66 (IQR 55-74)
- 70% newly diagnosed (n=28)
- 73% localised cancer (n=29)
- 55% overweight or obese (n=22)

Cancer diagnoses:
- Rectal (15% (n=9))
- Prostate (37% (n=16))
- Breast (37% (n=16))
- Oesophagus (15% (n=9))
- Other (8% (n=5))

Reported TSCs
48% (n=19)
- Moderate or severe (n=11)
- Females (n=11/17)
- Breast cancer (n=9/15)

Characteristics
- Stronger sweet taste (n=9)
- Stronger salt taste (n=7)
- Of those (n=16):
  - Stronger odour sensation (n=4)
  - Weaker odour sensation (n=4)

TSCs and nutrition impact symptoms
- TSCs significantly associated with:
  - Dry mouth (P<0.01)
  - Early satiety (P<0.05)
  - Fatigue (P<0.05)
- Those at nutritional risk (n=20) tended to report TSCs (P=0.057)

CONCLUSIONS

1. TSCs preceded CT or RT in almost half of treatment-naïve patients with solid tumours, notably stronger sweet and salt tastes
2. TSCs seemed more frequent in females and those with breast cancer
3. Most of those at nutritional risk reported TSCs
4. TSCs were significantly associated with other nutrition impact symptoms
5. Future research with common terminology for assessment, diagnosis and management of cancer TSCs is needed