

Magnetic resonance imaging in gustatory disorders:

Diagnostic usefulness with a cost analysis



Clinical challenge

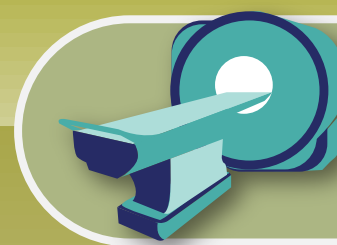
- 1. Isolated taste disorders are rare and diagnostically challenging
- 2. No standardized imaging guidelines exist



Cost analysis

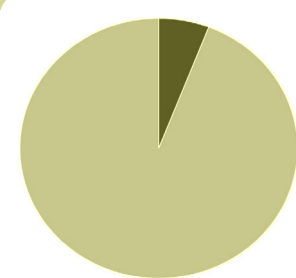
- Total MRI cost: 55,034 CHF
- Cost per taste-related finding: 7,862 CHF
- **Cost per attributable finding: 13,759 CHF**

Retrospective clinical review



MRI findings

- 70 MRIs
- 65 analyzable
- 54 abnormal findings
- 46 incidentalomas (70.8%)
- 8 potentially taste-relevant
- 4 clinically attributable (6%)
- 1 relevant MRI per 16 performed!**



Patients with taste disorder	No. of MRIs exclusively for taste disorders	% MRI	No. of abnormal MRIs	No. of MRIs/ abnormality	No. of taste-relevant abnormal MRIs	No. of MRIs per taste-relevant abnormality	No. of attributable taste-relevant MRIs	No. of MRIs/ attributable taste-relevant findings	Cost/ attributable taste-relevant findings (CHF)
125	64	51.2	53	1.2	7	9.14	4	16	13,758.72

Conclusions

- MRI rarely changes management in isolated taste loss → **Routine MRI not justified**
- **MRI only for selected cases after full clinical evaluation**

Suggested MRI indications



- Atypical/focal neurological symptoms
- Unexplained unilateral taste loss
- Known systemic/neurological disease
- Persistent idiopathic cases after full workup