Four-year demographic study of laryngeal carcinoma

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Introduction:
Laryngeal cancer is one of the most common head and neck malignancies, with a worldwide incidence of 11 in 100000 among males. Early disease, particularly when confined to the glottis, has an excellent prognosis with a 5-year disease free survival exceeding 90%. As with many cancers, survival rate declines with increasing stage and treatment options move from minimally invasive techniques such as trans-oral laser surgery, to significantly more invasive resections e.g. laryngectomy, with all the associated morbidities for the patient.

It is important to understand how laryngeal cancer may present, so that we can accurately diagnose patients with early symptoms, and educate patients to be vigilant for early warning signs. This may be important in particular in the community setting where a patient first presents with vague aero-digestive symptoms, and an improved understanding of the red-flag symptoms allow a patient to be promptly referred to a laryngologist.

Aim:
We reviewed the presenting features of laryngeal cancer referred to our specialist cancer unit over a four year period.

Methods:
• Retrospective descriptive study of patients diagnosed with laryngeal cancer at a specialist cancer centre between 2007 and 2011
• Data obtained from local entries into the Somerset Cancer Database, and supplemented with data from patient case notes.
  • Basic demographics
  • Presenting tumour details: location, TNM staging, histological staging
  • Treatment information: Modality of treatment (radiotherapy, laryngectomy etc.)
• Data entered into Microsoft Access 2007 database and analysed

Results:
102 patients presented with histologically confirmed laryngeal cancer over the four year period, comprising: 90 males (88.5%) and 12 females (11.5%)

Age distribution:

Smoking status:

Anatomical location:

TNM scoring:

Disease staging:

Histological findings:

Discussion:
From the data produced by our centre, it is clear that laryngeal cancer is routinely picked up at an early stage, with stage I and II diagnoses accounting for over 50% of cases. From our data, nodal disease was not common at presentation, and initial metastatic disease very rare. Disease of the subglottis was not present in this cohort, in keeping with the work of others that shows that this tumor location is uncommon.1

The large majority of all cases presented with a change in voice with other symptoms less common. Previous studies and audits have demonstrated that globus symptoms are a commonly referred symptom under the cancer pathway for head and neck cancer. As far as laryngeal cancer is concerned, our review failed to indicate one case where this was a presenting symptom. Further local audit into the significance of this symptom with regards its predictive risk of hypopharyngeal cancer would be worthwhile to optimise current urgent referral guidelines.

Other studies at our centre have demonstrated a very low sensitivity for voice hoarseness in referral pathways for cancer detection. Considering our findings, we would recommend that current or ex-smokers over 50 are referred urgently if hoarseness persists for over 2 weeks. Other patients not fulfilling this demographic should be referred if similar symptoms persist for over 4 weeks. In this way we can further improve the sensitivity of the referral pathway for picking up early stage laryngeal cancer.

Conclusion:
• Vocal change is a symptom of utmost importance in patients over 50 with a significant smoking history. We urge urgent referral for these patients after symptoms persist for more than 2 weeks.

References: