

Symptoms associated with risk of laryngeal cancer

A case-control study has outlined the risk of laryngeal cancer associated with symptoms that patients present to their general practitioner (GP) in the year before diagnosis.

Elizabeth Shephard, Molly Parkinson, and William Hamilton (all from University of Exeter Medical School, Exeter, UK) examined the records of 806 individuals who were diagnosed with laryngeal cancer in the UK between 2000–09, alongside those of 3559 controls matched for age, sex, and GP practice. The patients were drawn from the UK's Clinical Practice Research Datalink, a repository of information from more than 600 GP practices. The authors calculated positive predictive values for each clinical symptom in the patient population aged older than 60 years. Ten symptoms were significantly associated with laryngeal cancer. The largest single risk factor was hoarseness, which yielded a

positive predictive value of 2.7%, and an odds ratio of 9.04 (95% CI 2.77–29.45; $p < 0.01$). Other risk markers included sore throat, otalgia, and insomnia.

“No single symptom is present for every patient, so it becomes a case of trying to identify the combination of symptoms with a risk of laryngeal cancer of 3% or over that the GP may feel warrants being referred to ear, nose, and throat specialists”, explains Shephard. The investigators found that particular combinations led to sharp increases in risk. Hoarseness plus a second attendance for a sore throat was associated with a 12% chance of laryngeal cancer. The risk of laryngeal cancer exceeded 5% for sore throat plus either dysphagia, dyspnoea, or otalgia.

“It is unusual for GPs to see adults with a persistent sore throat or a sore throat combined with some of these other symptoms”, notes Hamilton. “So when such patients do present with

these symptoms, GPs should keep in mind the association with laryngeal cancer”. Hamilton suggests including an alert in GP computing systems so that when hoarseness is entered, for example, a prompt appears reminding the physician of the possibility of laryngeal cancer.

“The study gives a clear indication to people in primary care as to when they should be sending patients for further assessment by ear, nose, and throat specialists”, commented Kevin Harrington (Institute of Cancer Research, London, UK). He pointed out that laryngectomies have a profoundly negative effect on quality of life. “Anything that can improve early diagnosis and reduce the chances of patients needing a laryngectomy is an important step in the right direction”, he concluded.

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For more on the **laryngeal cancer study** see <https://bjgp.org/content/69/679/e127>