

# HPV-Positive Oropharyngeal Cancer

## The nurse's role in patient management of treatment-related sequelae

Jennifer Cerar, RN, CRRN, Katherine B. Bryant, BSN, RN, Scarlett E. Shoemaker, MSN, RN, Linda Battiato, MSN, RN, OCN®, and Gloria Wood, BSN, RN



**BACKGROUND:** Patients diagnosed with oropharyngeal cancer (OPC) make up about 3% of all new cancer cases in the United States, with increasing numbers of these patients being diagnosed aged younger than 45 years and with human papillomavirus (HPV)-positive disease. Treatment effects may alter patients' physical and mental states during and after treatment.

**OBJECTIVES:** This article provides an overview of possible OPC treatment long-term effects to equip oncology nurses with information needed to empower patients with OPC to perform self-care.

**METHODS:** The OPC literature was reviewed to identify incidence, survival, risk factors, symptoms, treatment options, and treatment effects.

**FINDINGS:** This article provides a foundation for the plan of care for patients with OPC and strategies for patients to contribute to their self-care.

**OROPHARYNGEAL CANCER (OPC), A SUBCATEGORY** of head and neck cancer (HNC), initially appears in the soft palate and back walls of the throat, tonsils, and back one-third of the tongue (National Cancer Institute [NCI], 2019) and makes up about 3% of all new cancer cases in the United States (NCI, n.d.). It was estimated in 2016 that about 70% of the 370,000 U.S. patients living with OPC were classified as human papillomavirus (HPV)-positive (NCI, n.d., 2020). HPV is a small, nonenveloped DNA virus that is known to infect the basal epithelial cells of the skin and the mucosal cells of the mouth, throat, respiratory tract, or anogenital epithelium (Burd, 2003). The HPV family consists of more than 100 viruses, but only 14 of these viruses are considered high-risk (carcinogenic) (Hamborsky et al., 2015). The viruses HPV16 and HPV18 are the most prevalent strains identified in HPV-related cancers (NCI, 2020).

Previously, patients with OPC tended to be aged older than 70 years, with a history of heavy smoking and alcohol use (D'Souza & Dempsey, 2011; Marur & Forastiere, 2016). As the rate of HPV-positive OPC has surpassed that of HPV-negative OPC, the patient characteristics have changed. In general, patients with HPV-positive OPC tend to be middle-aged Caucasian men with a history of nonsmoking and multiple sexual partners (Marur & Forastiere, 2016; Yin et al., 2018). This article provides information about HPV-positive and HPV-negative OPC and its late adverse treatment effects to help facilitate nurse-patient interactions, which can contribute to patient strategies to improve their self-care.

### Oropharyngeal Cancer Incidence

In the United States between 1988 and 2004, the incidence of HPV-positive OPC increased by 225% and the incidence of HPV-negative OPC dropped by 50% (Marur & Forastiere, 2016; Osazuwa-Peters et al., 2016). In addition, a retrospective analysis of 42,024 patients with OPC with known HPV status found that the majority of OPC cases were HPV positive and that the increase in overall numbers was independent of sex or race (Faraji et al., 2019). Based on Surveillance, Epidemiology, and End Results Program data across all races

#### KEYWORDS

HPV-positive oropharyngeal cancer; self-care; survivorship care and late effects

#### DIGITAL OBJECT IDENTIFIER

10.1188/20.CJON.153-159