

# Diffuse Malignant Pleural Mesothelioma: Part II. Symptom Management

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**D**iffuse malignant pleural mesothelioma (DMPM) is a rare disease that forms on the lining of the lungs. DMPM usually is associated with asbestos exposure and accounts for approximately 1% of all cancer deaths in the world (Peto, Decarli, LaVecchia, Levi, & Negri, 1999). The diagnosis of DMPM often is delayed because of nonspecific symptoms. Approximately 60%–90% of patients present with symptoms of dyspnea and chest pain (Grondin & Sugarbaker, 1999; Martin-Ucar, Edwards, Rengajaran, Muller, & Waller, 2001). Other common complaints at presentation include cough, fatigue, and weight loss, which can lead to anorexia or cachexia (Aisner, 1995; Grondin & Sugarbaker). Symptoms of DMPM can be present up to five months before a diagnosis is established (Merritt et al., 2001).

Patients diagnosed with DMPM have multiple disease- and treatment-related symptoms. The majority of patients with DMPM are diagnosed with advanced disease. Currently, no cure for DMPM exists and life expectancy usually is very limited. Aggressive multimodal therapy consisting of surgery, chemotherapy, and radiotherapy is used to treat DMPM. Supportive care is recommended for patients who are debilitated at diagnosis because they would not be able to tolerate aggressive therapy. The severity of symptoms increases as the disease progresses, putting patients at risk for anxiety and depression. Effective symptom management must be initiated early to assist in improving the quality of life for these patients.

Specific research about managing symptoms experienced by patients with DMPM is minimal. However, research findings about symptoms and symptom management

Patients with diffuse malignant pleural mesothelioma (DMPM) experience multiple symptoms from their disease and treatment, which can affect all aspects of their lives. Dyspnea, cough, pain, fatigue, depression, weight loss, anorexia, and cachexia are the most common symptoms. Early, ongoing assessment and management of these symptoms are imperative to maximize quality of life for patients with DMPM.

**Key Words:** dyspnea, pain, fatigue, depression, anorexia

in patients with lung cancer and patients with cancer in general are useful in identifying and describing possible interventions for patients with DMPM.

## Dyspnea

Dyspnea, as defined by the American Thoracic Society (ATS) (1999), is “a subjective experience of breathing discomfort consisting of qualitatively distinct sensations that vary in intensity” (p. 322). Physiologic, psychological, cultural, and environmental factors contribute to patients’ experience of dyspnea (ATS, 1999; Gift, 1990; Ripamonti & Bruera, 1997; West & Popkess-Vawter, 1994). Dyspnea was reported to be the number one presenting symptom in 46 of 101 patients with DMPM in a retrospective review (Merritt et al., 2001). In a study by Herndon and colleagues (1998), 70% of patients with DMPM (n = 337) reported that dyspnea was their chief complaint.

The subjective nature and multiple contributing factors make dyspnea a difficult symptom to assess. A variety of assessment tools for evaluation of dyspnea and interventions for relief exists. Available assessment tools include activity scales, such as the Pulmonary Function Status Scale, American Thoracic Standardized Questionnaire, Baseline and Transitional Dyspnea Indexes, and

Therapy Impact Questionnaire for Quality of Life. Self-report measures, such as the Medical Research Council Dyspnea Scale, Dyspnea Interview Schedule, Oxygen Cost Diagram, Modified Borg Scale, Cancer Dyspnea Scale, and Visual Analog Scale, also are available (Mancini & Body, 1999; Tanaka, Akechi, Okuyama, Nishiwaki, & Uchitomi, 2002c; Wickham, 2002). The most commonly used tool is the

visual analog scale, where patients rate their dyspnea on a horizontal or vertical line from no breathlessness to worst possible breathlessness (Ripamonti & Bruera, 1997).

Ideally, treating the underlying cause of dyspnea would eliminate this symptom; however, this is difficult to do in advanced-stage lung cancers (Gift, 1990). Dyspnea may be an indication of a phase in the illness in which resources should be shifted from acute intervention to palliative and supportive care measures (Ripamonti & Fusco, 2002). Goals of treatment are based on an assessment of subjective complaints and the limitations created for each patient.

The presence of pleural effusions and pleural thickening in DMPM contributes to dyspnea in this patient population. The prognosis

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