How Staging Affects Mesothelioma Prognosis

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What Are the Stages of Mesothelioma?

Mesothelioma is aggressive cancer, and although it can develop in the pleura (outer lining) of the lungs, the peritoneum (lining of the abdominal cavity) or pericardium (the sac that surrounds the heart), the place of origin is not always as important as the behavior of the cancer cells. Ultimately, the way this cancer grows and moves through the body will determine the appropriate treatment and prognosis.

Detecting Malignant Mesothelioma

Two different sorts of tumors can begin in the tissue that lines the lungs, the abdomen, the heart, and the testicles:

- Benign tumors are localized, non-cancerous, and can typically be removed with surgery.
- Malignant mesothelioma causes cancerous tumors in one area of the body, where they remain or spread to other areas of the body through the blood or the lymph system. This movement of cancer cells from the point of origin is called metastasis and indicates a later stage of the disease.

Several tools can help “stage” the disease, or reveal the progression of the cancer. Imaging scans such as CT scans, PET scans, x-rays, and endoscopic ultrasounds are efficient means of diagnosis, and biopsies (both needle and surgical) can return clear, tangible evidence. These procedures range from non-invasive to major surgical events, but they are all designed to seek out abnormal cells in the tissues and help determine patterns of cancer growth.

Understanding the Stages of Mesothelioma

There are four stages of mesothelioma, and each one is marked by specific events:

- **Stage I**: This stage is broken into two sub-stages. In stage IA, cancer is found in the lining of the chest wall or the diaphragm on *one side* of the body. It has not spread to the lining of the lung. In stage IB, the cancer is still only in one side of the body, but it has moved into the lining of the lung.
- **Stage II**: Now defined as advanced rather than localized, cancer has moved from one spot in the chest wall or diaphragm lining to the lining of the chest cavity between the lungs, the lining that covers the lung, and either the diaphragm muscle or the lung tissue. Cancerous cells are still only present on one side of the body.
- **Stage III:** This stage covers two different scenarios. One possibility is that the cancer is in the lining and/or tissue of the chest wall, diaphragm, lung or chest cavity, plus it has spread to the lymph nodes. The second scenario involves cancer in the lining of the chest wall, diaphragm, lung and chest cavity, plus it has moved into the fat in the chest cavity, the sac that surrounds the heart or the soft tissues between the ribs. It may have also spread to the lymph nodes.
- **Stage IV:** The most advanced stage of mesothelioma is characterized by multiple metastases in adjacent

or distant organs and tissues, possibly on both sides of the body. Surgery to remove the tumors is no longer a viable option.

Treatment Options for Early and Late Stages of Mesothelioma

Mesothelioma can have an extremely long incubation period before symptoms manifest, and the first signs are often mild and go unnoticed. If the cancer is caught too late, treatment will be palliative, or directed at symptom relief rather than disease suppression.

On the other hand, the outlook is much better if a combination of surgery, radiation, and chemotherapy can be used, so an early diagnosis can make an enormous difference in prognosis.