

**Title:**

Malignant mesothelioma - The cancer of the mesothelial cells

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**Summary:**

Malignant Mesothelioma can be defined as the cancer of the mesothelial cells which become abnormal and start dividing without any order.

**Keywords:**

Malignant mesothelioma

**Article Body:**

The diseased defined

Mesothelium is the protective tissue that covers the chest cavity, abdominal cavity and the cavity around the heart and also produces a special lubricating fluid that allows the internal organs of the body to move around. Malignant Mesothelioma can be defined as the cancer of the mesothelial cells which become abnormal and start dividing without any order. Majority of the mesothelioma patients have a prior history of exposure to asbestos.

**Types of malignant Mesothelioma**

Malignant Mesothelioma or simply Mesothelioma can be divided into 3 main types namely

- Epithelioid
- Sarcomatoid
- Mixed/biphasic

Of these, Epithelioid is the most common (50% to 70% cases) and stands the best chance of recovery. Sarcomatoid type is seen in 7% to 20% cases whereas mixed/biphasic type is seen in 20% to 35% cases.

Approximately,  $\frac{3}{4}$  of the total cases of Mesothelioma originates in the chest cavity (pleura) and is known as pleural mesothelioma. The cancer affecting the lining of the abdomen (peritoneum) is called the peritoneal mesothelioma and that affecting the "sac like" space around the heart (pericardial cavity) is called the pericardial mesothelioma. Mesothelioma at times also affects the covering layer of the testicles. However, the last two types of cases are quite

rare.

## Diagnosis of malignant Mesothelioma

The tumors of the mesothelium can either be benign (non cancerous) or malignant (cancerous). So whenever there are symptoms like shortness of breath, pain in chest/abdomen or swelling in the abdomen, you should consult your doctor immediately.

After the initial X-rays and scans, the doctor may look inside the chest cavity (in case of pleural tumor) with an instrument called thoracoscope and the test is called thoracoscopy. In case of tumor in peritoneum the doctor may go for peritoneoscopy with the help of a tool called peritoneoscope. Finally, if the abnormal tissue is found then a biopsy is done, whereby a piece of the unnatural tissue is cut out and placed under microscope for examination.

After the confirmed diagnosis of Mesothelioma it is also essential to ascertain its stages i.e. whether it is in localized stage or in advanced stage. In the localized stage, the cancer is found in the lining of the chest cavity or in the diaphragm or the lung. Advanced malignant Mesothelioma can again be divided into 3 stages namely stage II, III and IV. In stage II, the cancer spreads beyond the chest lining to lymph nodes and in stage III it spreads into chest wall, center of the chest, heart, through the diaphragm or abdominal lining, etc. The final or the fourth stage is the one in which the cancer has already spread to distant organs.

## Treatment

Depending on the stage of the cancer, its location and the health, age and medical history of the patient, 3 types of treatments are mated out to malignant Mesothelioma patients - surgery (to remove the tumor), radiation therapy (application of high energy rays) and chemotherapy (usage of combination of drugs). This apart, if there is any accumulation of fluid in the chest or abdomen, then the doctor needs to drain it out and the process is regarded as thoracentesis and paracentesis respectively.

So be aware of the disease, such that you can prevent it at the very onset.