Réseau de cancérologie Rossy

Rossy Cancer Network

Establishing quality care for patients with malignant pleural mesothelioma – the EQUAL CARE Program

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INTRODUCTION

Malignant pleural mesothelioma (MPM) remains one of the most lethal cancers, one for which exposure to asbestos is the most recognized risk factor.

Considering the long history of asbestos mining in Quebec, it is not surprising that about 30% of all new annual MPM cases in Canada come from Quebec.

Presently, there is no formal trajectory for patients with a newly diagnosed MPM within the Rossy Cancer Network (RCN) partner hospitals. The delays in patient diagnosis and treatment not only impacts quality of life and patient anxiety, but may also have a profound impact on survival.

Given the overall poor disease prognosis, the highly symptomatic nature of MPM, and the fact that MPM incidence is going to continue to increase for at least the next two decades, it is clear that timely access to treatment and therapy is of crucial importance to the survival and quality of life of patients.

In addition, the low prevalence of this disease makes enrolment in clinical trials challenging and emphasizes the need for a regional/provincial treatment centre.

HYPOTHESIS

Establishing a centralized, rapid access MPM program to streamline the investigations and management of newly diagnosed patients with MPM within the RCN will result in **a decrease in wait times, improved quality of life** and **potentially, improved oncologic outcomes**.

OBJECTIVES

✓ ***Phase 1***: Design comprehensive institutional protocols to streamline the management of MPM
- ➢ *Knowledge transfer and protocol design phase*
- ➢ Establish website and conduct community outreach to referring physicians

✓ ***Phase 2:*** Develop a clinical database that will be used to track MPM patients
- ➢ 10-year retrospective review of MPM outcomes at the McGill University Health Centre and Jewish General Hospital to guide prospective database setup

Phase 3: Conduct an impact evaluation of the program
- ➢ Impact of program on time from presentation to Dx, Dx to Rx and effect on QOL

Phase 4: Assess long term oncologic outcomes such as disease progression, overall survival and disease free survival.

METHODS

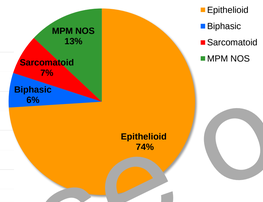
RESULTS

RETROSPECTIVE ANALYSIS OF MPM AT THE MUHC OVER A 10-YR PERIOD

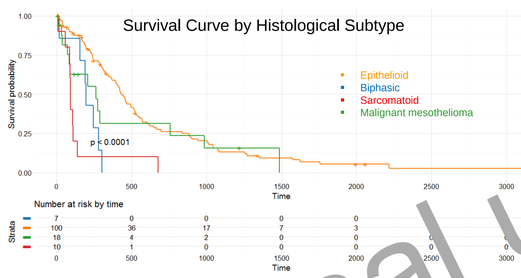
n = 145

- Available data too sparse to provide accurate staging
- Highly variable work ups and staging modalities

Histological Distribution

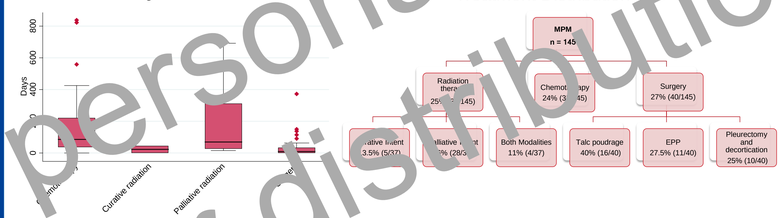


Survival Curve by Histological Subtype



Time from Diagnosis to First Treatment

Treatment Distribution



Median number of days:

from Date of Dx to Tx	→	37 (1 month and 6 days)
from Date of Dx to Chemo Tx	→	86 (2 months and 26 days)
from Date of Dx to Curative Rx	→	22
from Date of Dx to Palliative Rx	→	69 (2 months and 9 days)
from Date of Dx to Surgery	→	9

*Further chart review is required/ ongoing to determine the percentage of patients receiving multimodality therapy – pending results

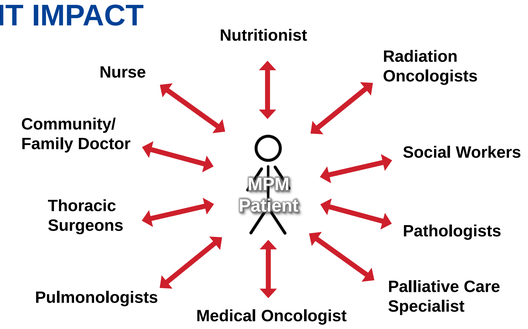
PATIENT IMPACT

Currently, malignant pleural mesothelioma (MPM) is an orphan disease at McGill and across all RCN sites. Patients are randomly referred to pulmonary specialists who do their best to manage this patient population. Often, their symptoms have been present for a long period of time before a diagnosis of MPM is ever made. Due to the lack of established care pathways, the initiation of treatment is slow and inconsistent.

✗ No dedicated expert teams for MPM
✗ No clinical trials for patients with MPM
✗ No established program for MPM

The Integrated Program for Pleural Mesothelioma

PATIENT IMPACT



TRANSLATION ACROSS THE RCN

DEVELOPMENT OF CONSENSUS GUIDELINES ACROSS THE RCN

➢ **DIAGNOSIS**

Pleural effusion OR Thoracic imaging indicative of malignant pleural mesothelioma OR Significant history of asbestos exposure

- Chest CT with contrast
- Thoracentesis, if pleural effusion present

→ Surgical thoracoscopic biopsy → Confirmed dx of Malignant Pleural Mesothelioma ***Reflex testing: PDL1 and MSI***

Non-diagnostic tap with high suspicion of MPM → **Thoracic Surgery Consult**

➢ **EVALUATION AND TREATMENT**

Curative Intent
- Short course hemithoracic radiation → extrapleural pneumonectomy +/- chemo
- Trimodality therapy: systemic chemo → pleurectomy decortication → IMRT

Limited stage (cI-III) based on PET in PS 0-2 patient:
- EBUS +/-VATS talc poudrage +/- diagnostic laparoscopy
- 6-minute walk test
- Quantitative V/Q scan
- Cardiac stress testing
- Echocardiography

✓ PET CT
✓ ECOG status
✓ PFTs
✓ Patient desire for curative intent QOL questionnaire
✓ Early palliative care consult/evaluation
✓ Thoracic tumour board presentation

Palliative Intent
- Palliative consult
- Best supportive care
- +/- palliative chemo
- +/- palliative radiation
- +/- VATS decortication/talc poudrage

← Advanced stage (cIV) based on PET and/or PS > 2

Clinical trial options:
1. Pembrolizumab – Canadian Cancer Trials Group (CHUM)
2. KEYNOTE-158 – Merck (MUHC and JGH)

McGill

Centre universitaire de santé McGill — McGill University Health Centre

Hôpital général juif — Jewish General Hospital

Centre hospitalier de St. Mary — St. Mary's Hospital Center