Multidisciplinary Case Conferencing (MCC)

by PIERRE MAJOR AND ROSEMARY COLUCCI

The optimal treatment of several malignancies requires input from medical, radiation and surgical oncologists and from radiologists and pathologists.

MCCs or tumour boards provide a forum for the discussion of cancer cases. MCCs have been part of organized cancer care for decades. Very little information has been compiled on the impact of MCCs on clinical care or the clinical benefit for patients. Performing a blinded trail where patients would be randomly assigned to have their case discussed or not at a tumour board and then following patients to assess the outcome would be the most stringent way of establishing the benefit of a tumour board on clinical care. Such an experiment is impractical. More indirect evaluations have established that MCCs result in more consistent application of clinical trial results to clinical practice; this has resulted in outcomes similar to those achieved in clinical trials. MCCs also result in more consistent clinical practice among the participating oncologists.

MCCs have two distinct functions. They allow clinicians to discuss difficult cases where sharing expertise among specialists can help design an optimal clinical treatment plan. When published clinical trial results do not apply to a specific case, collective experience may provide the best available treatment plan. MCCs can also provide quality control for clinical practice in a group; this requires that most cases be reviewed by the MCCs.

Many tumour boards focus on the first objective; understandably so since this meets the urgent needs of the clinicians responsible for planning the care of a patient with a complex or unusual case. Improving and documenting the quality of care is increasingly required from providers. In this context the review of all cases would be desirable with documentation of treatment decisions and explanations for treating a patient outside of usual practice because of exceptional clinical circumstances.

Evaluating the performance of MCCs requires the development of a standard template of the information required to properly evaluate a case, including pathology reports, staging, imaging studies, information on comorbidities, the treatment plan and its consistency with locally implemented carepaths. This assumes that the tumour board has locally applicable practice guidelines that are kept up to date. The electronic dossier to capture this information has not yet been developed. This is an area where regional or provincial agencies responsible for cancer care can provide support to their clinics. If each clinic is to develop its own forms and procedures, there will be enormous duplication costs that should be avoided. Initiatives to address these needs are ongoing but timelines for their completion and implementation are not available.

MCCs can certainly be used to monitor adherence to standards of care and provide educational opportunities. Achieving these objectives requires organization. The different and sometimes conflicting roles of MCCs need to be defined so that:

- patients benefit from rigorous review of their treatment plan,
- physicians benefit from the educational benefits of discussing cases and the opportunity to share knowledge and experience with colleagues, and
- health system managers see the value of MCCs and commit the required resources for their operation.

The interest and commitment of cancer care providers in providing the structures for conducting tumour boards and evaluating their performance is an excellent development. Multidisciplinary input for planning preoperative and postoperative care for cancer patients is essential to ensure that patients benefit from the advances in clinical cancer research. Ontario is one example of a jurisdiction that has developed MCC standards and a strategy for their implementation.

The CACC will continue to monitor developments in this area and advocate that all patients benefit from application of this quality improvement tool to their care.

To assess the participation and interest in MCCs the CACC conducted a survey of cancer clinics across Canada. The questionnaire and survey results are available on the CCAC web site.

Most organizations with responsibility for the comprehensive care of patients with cancer have MCC in their clinics. There is also interest in expanding MCCs in an attempt to offer the benefits to all patients where multi modality treatment is being considered. Organizing MCCs and documenting their deliberations requires dedicated personnel and facilities. Pathologists, radiologists and the different oncology clinical specialists have clinical responsibilities that limit their availability, which is a major obstacle for broad participation in MCCs. Teleconferencing tools may provide clinicians in more isolated locations with the ability to offer their patients the benefits of MCCs. In some cases, with sufficient coordination the slides can be forwarded to the expert pathologist for review prior to case conferencing. This assumes that pathologists are available in smaller, or remote communities, which is not always the case. One serious issue that has arisen is the shortage of expert cancer pathologists: MCCs cannot be expected to fully ameliorate a shortage of cancer specialists. Recent misdiagnoses of cancer (Newfoundland, New Brunswick and recently Ontario) highlight this issue.

All the organizations surveyed endorse MCCs to improve clinical care and evaluate quality of care. The major hurdle appeared to be resources to organize, coordinate and document tumour board activities and the impact on patient outcomes. In large clinical groups MCCs for different types of cancers such as breast cancer, bowel cancer, head and neck cancer, gynecological and urological malignancies, can be organized. Smaller centres may not have sufficient numbers of cancer cases to warrant multiple tumour boards and will discuss all types of cancers during MCCs; patients in these centres might benefit most from the ability of their treating physician to participate in teleconferencing.

Pierre Major is a Medical Oncologist based in Hamilton, ON and is Vice-Chair of the CACC.
Rosemary Colucci is a consultant to the health sector in strategic planning, stakeholder relations and advocacy strategy.