June is Cancer Survivors Month: Focus on Hearing Loss

Cancer treatment is highly variable and is determined by the Oncologist based upon the diagnosed type and stage of cancer. Certain types of cancers require the administration of potentially ototoxic (or cochleotoxic) agents, which means that they could be toxic to the ear and hearing. Some examples of chemotherapeutic ototoxic agents include, but are not limited to: carboplatin, cisplatin, nitrogen mustard and vincristine. Some antibiotic agents which have shown good evidence for ototoxicity include, but are not limited to: capreomycin, erythromycin, gentamicin and neomycin. Some chemotherapeutic agents may also be vestibulotoxic, which means that they could be toxic to the balance mechanism of the inner ear. The results are variable, but the patient may experience symptoms of dizziness or vertigo. Evaluating the risks from ototoxic agents over the larger benefit from cancer treatment is part of the decision-making process between the oncologist and the patient.

It is important to obtain a baseline audiological evaluation prior to the administration of known ototoxic agents. This should be performed within one week of the initial administration of ototoxic medications. Some doctors may use the baseline audiogram to determine which drugs to use. For instance, if a person has a history of high frequency hearing loss and exposure to loud noise, then the medication that is ototoxic may not be indicated.

Audiograms may subsequently be obtained at intervals throughout the course of treatment, generally prior to each successive administration. Otoacoustic Emissions (OAE) testing is also performed at each evaluation. This test assesses the outer hair cells by measuring an “echo” type response from the cochlea in response to multiple frequency stimuli presented through a small microphone placed in the ear canal.

During treatment, the patient is also systematically questioned regarding symptoms of tinnitus (ringing in the ears) or dizziness following administration of medications and may be asked to fill out questionnaires related to the same.

As with many medical treatments, there are risks and benefits to all interventions. Hearing loss, while not an optimal side effect of treatment, may be a better risk to take than to lose a life over not selecting the optimal cancer treatment option. Should hearing loss result, rehabilitation measures including hearing aids may be recommended pending medical management in order to enhance the patients’ communication abilities. An audiologist can also help with tinnitus retraining therapy for those patients who experience tinnitus as a result of treatment.

Hearing evaluations and hearing aid dispensing services are available at St. Peter’s Hearing & Speech, located at 1240 New Scotland Road, Suite 100, Slingerlands. Appointments can be made by contacting 475-7075. For symptoms of vertigo or dizziness, appointments can be made with a vestibular therapist at St. Peter’s Physical Therapy & Fitness by contacting 475-1818.