3) Targeting specific myotomes (Fig. 2). Patients with sarcomas may have pain in a soft tissue that can be localized to a myotome and the nerve root(s) that innervate the area. Using information from the patient, physical examination, imaging and myotomal charts may help target treatment. For example, suppose a patient has a sarcoma arising from myotome-derived skeletal muscle that is predominantly innervated by the left L2 nerve root. Theoretically, a catheter could be placed posterior to where the left L2 nerve root enters the cord so that the injected SP-SAP would be close to the dorsal horn (which is the target).

4) Consideration of the baricity of SP-SAP may also be useful to more efficiently direct the placement of the drug in the spinal fluid.

Along with discussions to improve drug delivery and efficacy are considerations of the patient population being treated now (end-stage cancer patients unresponsive to opioid treatment) and future populations that could benefit from treatment with SP-SAP. In the current trial, several patients had previous spine surgery that complicated the catheter placement for intrathecal treatment. Also, patients have had heterogeneous and progressive disease and worsening pain during the study, complicating the interpretation of responses. For example, several patients reported a reduction in opioid requirements and transient pain relief. In a population where pain continues to spread along with the cancer, it is difficult to determine if the transience is due to the dose level of SP-SAP (too little) or the establishment of ‘new’ pain.

End-stage cancer patients are a needy population that desperately need relief from chronic pain. The early signs of efficacy for SP-SAP are encouraging and the next doses (64 mcg and 90 mcg) may bring the long-term pain relief needed.

References