Survey of ERAS Provider Practices Across North America and Europe

While there have been a proliferation of ERAS programs across the globe in the past few decades, the exact nature of the individual ERAS programs remains unknown. Specifically, not all ERAS programs and practitioners follow the same exact pathway. Regional and philosophical differences have thus resulted in a mixture of different practices, all enveloped under the same umbrella of "ERAS."

The purpose of this survey was to determine which providers are performing which ERAS interventions at their programs. 21 Individual questions pertaining to the perioperative process were asked of ERAS clinicians worldwide. Questions focused on preoperative education, the carbohydrate beverage, use of multimodal analgesia, goal directed fluid therapy (GDFT), ambulation, and diet. For the US, the ASER database was used to identify ERAS providers and for Europe the EPBOM database was utilized, with permission. 91 full responses were received with 41 from North America and 50 from Europe. Differences were seen in the location where the patient education materials were provided. Whereas in Europe it seems to be provided in the preoperative service (POS) clinic, in North America it is evenly divided between the POS clinic and the surgeon's office ($p<0.0001$). With respect to the carbohydrate beverage, in Europe the vast majority of the time the hospital purchased the carbohydrate beverage whereas in North America the results showed almost half the time the hospital purchased it and other times it was the patient ($p<0.0001$). In looking at multimodal analgesia, IV acetaminophen was administered more regularly in Europe than North America ($p<<0.0001$), but PO celecoxib and gabapentin were administered more consistently in North America ($p<0.0001$, $p<0.0001$). There were no differences noted in the days to progression of ambulation, use of goal directed therapy, or diet advancement.

Our study is limited in that the sample size is quite small given that there are several thousands of ERAS providers worldwide. Also, our survey did not have a mechanism to limit the number of responses from one particular institution. Thus, many responses may have come from one ERAS site. However, what we can conclude from this survey is that the providers, not necessarily programs, in Europe practice ERAS somewhat differently than in North America. Reasons for this discrepancy may be rooted in regional differences in the health care industry with Europe having more government oversight and possibly a different structure than the US, where private enterprise often runs hospital choices. Future research in this area should make an attempt to gather different protocols from the different sites and analyze practices from location to location.