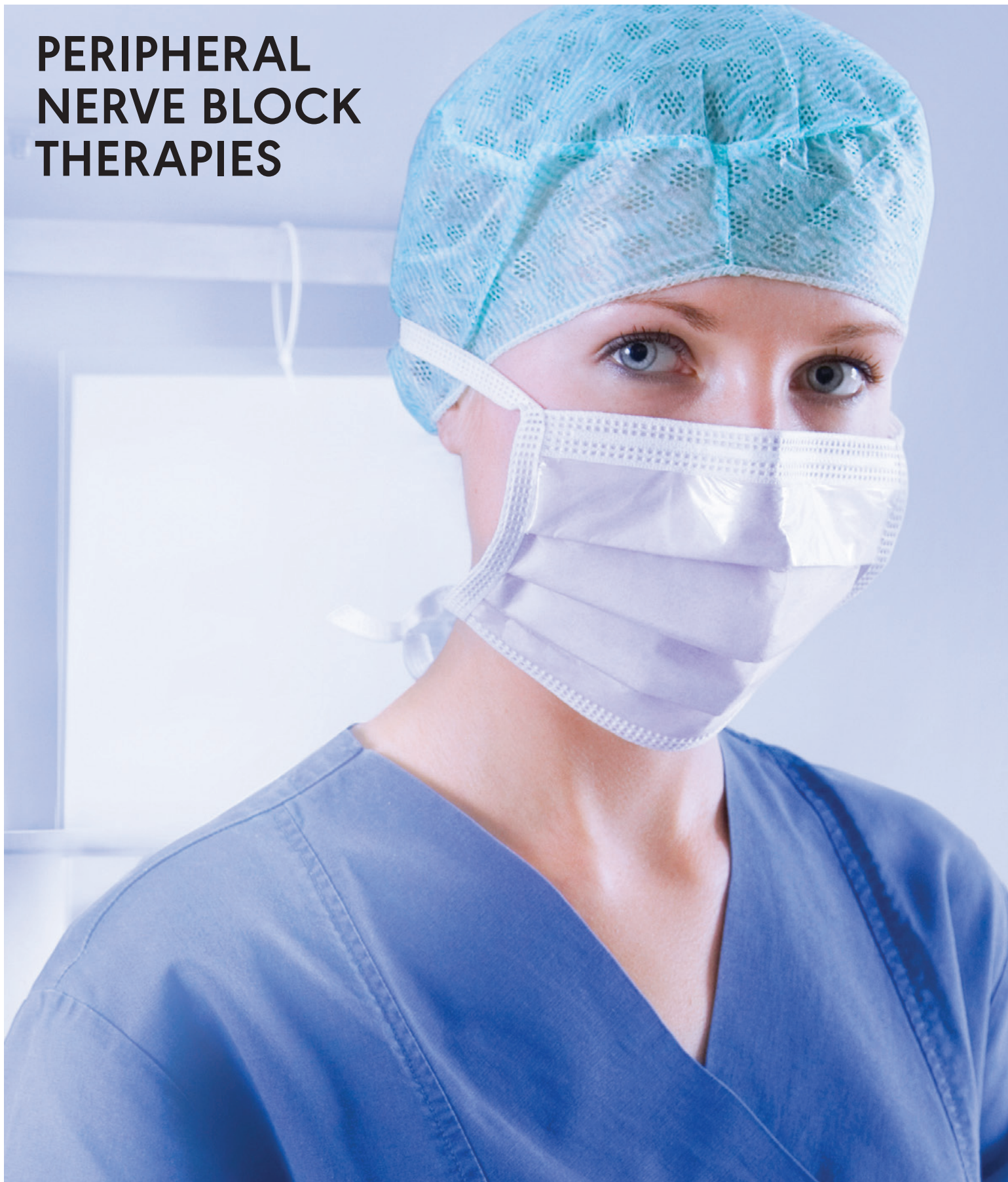


**PERIPHERAL  
NERVE BLOCK  
THERAPIES**



# PAIN MANAGEMENT YOU CAN DEPEND ON.

## CONTINUOUS PERIPHERAL NERVE BLOCKS

### ORTHOPEDIC

The practice of regional anesthesia has expanded greatly over the past two decades.<sup>1</sup>

As nerve block techniques, availability of training programs, equipment and technology have progressed, more patients are benefiting from superior non-narcotic postoperative pain control reducing the need for opioids and their related complications.<sup>2,3</sup>

The impact is particularly evident in orthopedic surgery where patients may achieve earlier mobilization and return to daily activities, in addition to shorter hospital stays, with fewer complications.<sup>3,4,5</sup>

#### Patient Benefits of Continuous Peripheral Nerve Blocks (CPNB) Orthopedic Surgery

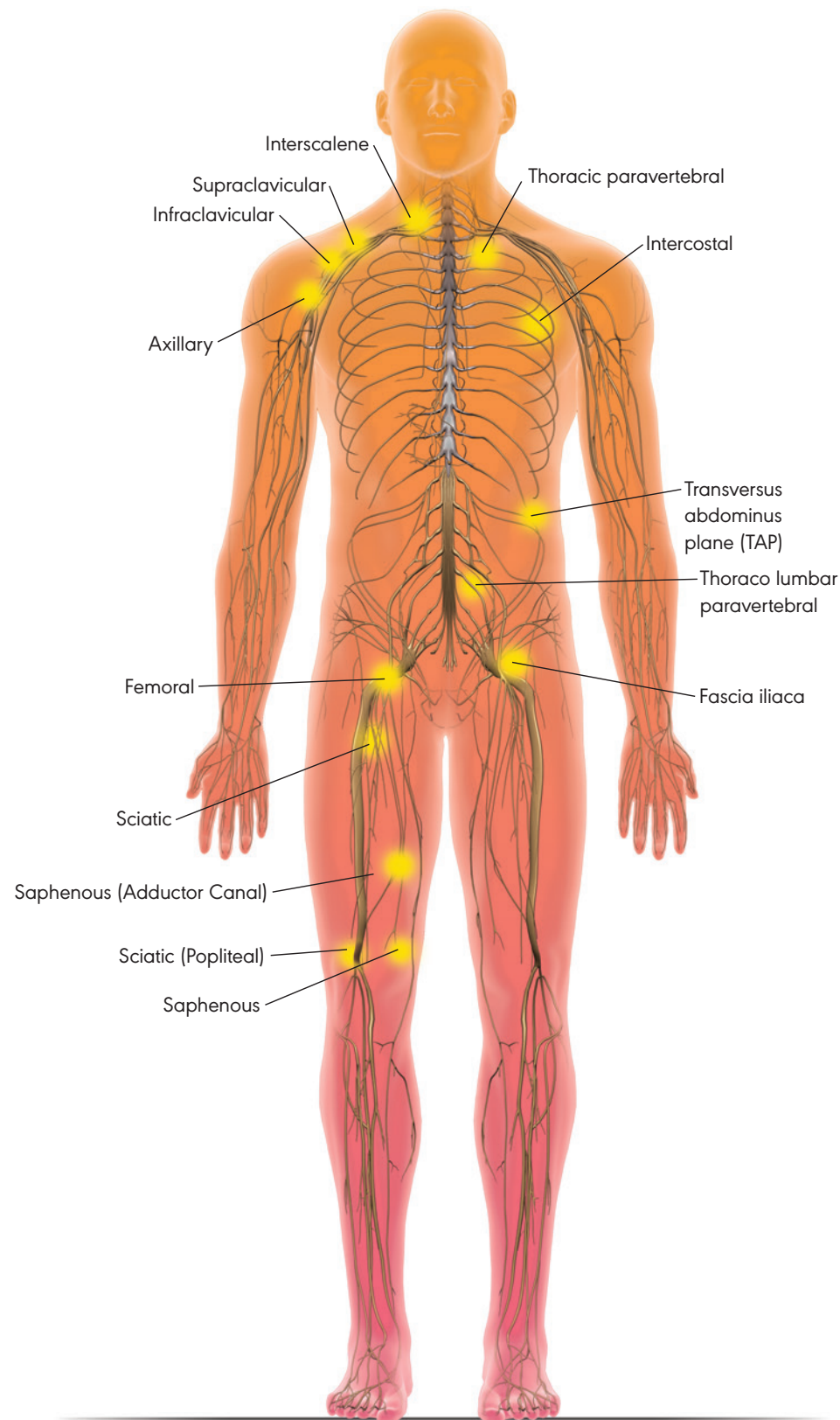
- Quicker rehabilitation and time to ambulation<sup>4,5</sup>
- Earlier time to discharge<sup>4,5</sup>
- Higher Patient Satisfaction<sup>3,4</sup>

#### Compared to Single Shot, CPNB Resulted in:<sup>3</sup>

- ↓ Decrease in pain scores through POD2 (P<0.001)
- ↑ Higher Patient Satisfaction (P<0.001)
- ↓ Decrease opioid use (P<0.001)
- ↓ Reduced nausea (P<0.003)

“Collaboration between surgeons and anesthesiologists regarding postoperative pain management contributes in improving patient outcomes and satisfaction. A successful nerve block program as part of a multimodal approach of postoperative pain management is the key. Pain after orthopedic procedures can be easily controlled by continuous peripheral nerve blocks even in ambulatory settings.”

**Didier Sciard, M.D.**



### THORACIC & ABDOMINAL

The advancement of ultrasound technology has facilitated the use of nerve block techniques such as transversus abdominis plane (TAP) and paravertebral blocks (PVB) for a variety of surgeries including abdominal, thoracic, breast and urological procedures. TAP and PVB offer patients effective pain management and may be alternatives to epidural analgesia without the adverse side effects.<sup>2,5</sup>

#### Patient Benefits of PVB Thoracic Surgery

- Pain relief as effective as epidural with reduced complications.<sup>6,7</sup>
  - reduced incidence of pulmonary complications<sup>6,8</sup>
  - reduced PONV, hypotension and urinary retention<sup>6,8</sup>
  - may be an alternative for patients where epidurals are contraindicated<sup>5,9</sup>

#### Patient Benefits of TAP Block Abdominal Surgery

- Significantly better pain scores at rest and while coughing<sup>10,11</sup>
- Reduced opioid use and associated side effects<sup>12,13,14</sup>
- High patient satisfaction<sup>10,13</sup>

“The use of ultrasound for nerve location has substantially increased the use and consistency of peripheral nerve blocks, including the use of continuous TAP and paravertebral blocks to manage postoperative pain. In expert hands, these blocks can provide excellent pain relief and often present an alternative to epidural analgesia with less side effects.”

**Admir Hadzic, M.D., PhD.**

EPIDURALS

SINGLE SHOT

WOUND INFUSION

CONTINUOUS BLOCKS

ADVANCEMENTS IN REGIONAL ANESTHESIA



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