

Performing My First Caesarean: A Reflection on the Intersection of Dance and Surgery

By Shilpa Darivemula and Roshni Prakash

Many aspects of Indian Classical dance parallel the process of learning the steps of my first Caesarean section. Beyond just learning the surgical choreography, learning to be aware of your surroundings, your surgical team, your patient and your surgical field are lessons taught in the operating room. Many of these lessons are parallel to a dancer's awareness of her audience, her stage and her orchestra. This narrative piece highlights these connections, suggesting further inquiry into dance training as a form of surgical education.

Ta-ki-ta. Ta-ka-dbi-mi. My heart beat loudly in my ears as I scrubbed my hands. My senior resident leaned in and whispered, “It’s your first Caesarean section as primary surgeon—stress is normal. Remember the steps of the surgery, remember the movements. Can you recite them to me?” My intern hands recalled the surgical choreography I had practiced, pausing only to extend a palm to receive an imagined instrument from the scrub technician. It was in that instant I returned to my first performance in dance.

I began dancing Kuchipudi, one of the classical dance forms of India, when I was eight. Hand gestures (*mudras*) combined with basic footwork to form steps (*adavus*), which coalesced into complex sequences of movements (*jathis*). Practicing these *jathis*, I noticed how each part of my body moved in smooth concert. As my training progressed, I began to perform dance-dramas for audiences, observing how lighting, live orchestra and costumes created moods, highlighted performances, and visualized the stage. The performer who was both aware of these components, yet so practiced that their movements seamlessly occurred without pause for thought was celebrated as a professional, mesmerizing artist.

Leonardo da Vinci could be considered one of the first to blend anatomy and artistry.¹ Henry Tonks, a Victorian surgeon and painter and Barbara Hepworth, a sculptor who explored the artistry of the operating theater, serve as examples of artist-surgeons who excelled in both fields.¹ I often think about the perceptual-motor learning that is shared between skilled artists and surgeons—what deft strokes of the brush, control of the drawing pencil and command of the scalpel are required to achieve mastery over surgical choreography. One article explores the process of acquiring perceptual motor skills for gynecological laparoscopic surgery by paralleling its artistic skills, noting the multiple individual processes for minimizing redundant movements—movement economy—and maximizing visuo-motor adaptations.⁴ While the performance and visual arts have been cited as training mediums for improvement in surgical skills, dance—a medium of agility, body control, and spatial awareness—has rarely been explored.²⁻⁴

Taking a deep breath, I entered the operating room and spun into my gown and gloves. The spotlights were brought into position, visualizing the stage—the patient—while the operating staff-audience was held in a moment of silence during the surgical time out. The Pfannenstiel incision was made. Narrow focus on the surgical field engulfed the team—the attending, the senior resident and myself. Bleeding was cauterized swiftly. Controlled incisions were made through the fascia.

Instrument change. Faces obscured by masks, I read eyes—crinkles suggested smiles of approval and furrowed brows noted potential for improvement. A pause to determine space for delivery. Gentle movement noted at the uterus. Request for the scalpel. Timer started. Fluid gushing. Blunt extension to widen the entrance. Moments later, the cry and ensuing celebration of the birth of a new baby girl. Eye movement from the attending and senior resident reminded me to focus on my surgical field once more. Suture danced quickly to close the hysterotomy. Bleeding ceased. Six eyes scrutinizing the abdomen. The lap wiped the paracolic gutter deftly. Observe. Bleeding restarts, before calming down with cautery. Fascia, subcutaneous tissue, and skin closed after calls for each suture. ‘Speak up’ says the attending. Twisting fingers made knots that concluded each surgical *jathi*, leaving only a scar behind. A memory of my first surgical performance.

The parallels between classical Indian dance and surgical training are ever present for me. Every surgery feels like a vital performance, a group choreography of spatial, temporal and situational awareness, of swiftly moving limbs and instruments in a perfect synchronization. Hand gestures, or *mudras*, once learned to symbolize the sun, for example, now formed the surface to receive the next instrument. Postures, such as half-seated *aramandi*, held with utmost precision in performances were now used to maintain surgical sterility and withstand extended hours at the operating table. Eye movements that were once taught to express emotions now became a form of unspoken communication amongst the team—a method of nonverbal training essential for navigating the Caesarean section with an awake patient. Although far from any Da Vinci, Tonks, or Hepworth, I felt suddenly the power behind approaching surgery as a dancer, of developing the skills of both artist and physician to achieve that mesmerizing magic one day in the operating theater.

References:

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