Eugen Aburel - The Father of Continuous Regional Anesthesia in Obstetrics

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Eugen Aburel was born in Romania in 1899, and graduated from the Faculty of Medicine of Iasi (Romania) in 1923. During the first five years of his career he switched from psychiatry to general surgery, and finally settled to obstetrics and gynecology (1). Dr Aburel came to Paris in 1928 to complete his training in obstetrics. He did clinical work at Tarnier clinic and Boucicaut hospital, and also did research in Physiology at Sorbonne. He returned to Romania in 1933, and was appointed Professor of Obstetrics and Gynecology at Iasi in 1936 (1).

By 1930, when Dr Aburel was doing research on uterine innervation and the pain of labor, single shot epidural (caudal) anesthesia was a well-known technique (2,3). Epidural (caudal) anesthesia was first described 1901, when 2 French physicians – Sicard and Cathelin- injected local anesthetic in the epidural space through the sacral hiatus (4). Cathelin envisioned but did not attempt to apply his new technique to alleviate the pain of labor (2). Stoeckel of Marburg was the first to describe in 1909 caudal anesthesia use in the obstetric population; by 1930 thousands of cases of caudals in obstetric population have been reported (2,3). The currently used lumbar approach to the epidural space was first described by a Spanish surgeon, Pagés, in 1921, but was popularized by another surgeon, the Italian Dogliotti in 1933(2).

Dr Aburel identified the fibers responsible for the pain during stage 1 and 2 of labor. He described the T11-L2 pain afferents of stage 1 and S2-S4 afferents of stage 2. He published his research three years before the classical paper of Cleland on uterine innervation (4). With the two stages of labor in mind, he published in 1931 a paper that will set the basis for continuous regional techniques. His paper “L’anesthésie locale continue (prolongée) en obstétrique,” proposes continuous lumbar paraortic plexus block using a silk catheter for pain control during stage 1 of labor and a caudal block for stage 2. He deserves recognition not only for continuous lumbar plexus block but also for suggesting a Method of continuous epidural block. (1,4,5).

Being aware of the work of Pagés and Dogliotti and their simple, reproducible technique of locating the lumbar epidural space, Aburel was determined to adopt this approach and apply it to the obstetric population. The Results of his work were published in 1938 in a doctoral thesis “Peridural segmental analgesia with percaine in labor, professor Aburel Method”(4).

Our understanding of the uterine innervation and our main Method of pain relief during labor – continuous lumbar epidural analgesia - started with a young Romanian obstetrician in Paris, determined to find better ways to defeat the pain of childbirth.

1. Curelaru I, Anaesthesia 1982; 37: 663