Fundamentals of Anaesthesiology

Neurophysiological Basis of the General Anaesthetic Techniques and Mechanism of Anaesthetic Complications in Peri Operative Period

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The Book is structured into three sections. In the 1st section, the author discusses the Fundamentals of Anaesthesiology and its evolution as a Specialty by quoting that, “Anaesthesiologists can play a role of consultant to help seriously ill patients during and after surgery”, provided the fundamental principles of anaesthesiology are revised and made understandable to the common man who receives the benefit of anaesthetic services during the surgery or to mitigate pain. The thin line of difference between Anaesthesiology and Enthusiasm to hyper-ventilate the patients has been discussed beautifully by citing published Research Papers for more than 25 years. The results of the research for 25 years indicate that in a paralysed patient the intermittant positive pressure ventilation (IPPV) is the main tool to produce ideal operating conditions by causing deactivating pattern of the neurones of the cerebral cortex in the patient undergoing surgery. This fact is so far not known to the anaesthesiologists.

Hence the research carried out and given out in this book gives the anaesthesiologists correct information about the neuro physiological facts which are responsible to produce ideal operating conditions because during surgery vagal nerves (due to IPPV) strengthen the deactivating system existing in mulbar reticular formation.

The introduction of Skeleto Muscular Drugs to paralyse the patient by using suitable circuit for delivering the gasses through IPVV has been elaborated in the 2nd Section. The author feels that anesthetic complications which occur in Peri Operative Period are due to many factors among them an unidentified factor has been discovered called P factor (Patient Personality factor) which plays a vital role with its potency to cause catastrophe in Peri operative Period. This concept has been discussed in detail in this book. The 3rd section contains summary, conclusions, epilogues and acknowledgements.

The Book attempts to focus on the necessity of research, to be carried out to find various factors which produces ideal operating conditions to rule out complications in Peri Operative Period. For this, a set of frequently asked questions are assembled ranging from, ‘Why some Patients Develop Coma and Paralysis in the Post Operative Period’. Hence, the author has made an attempt to connect the bridge between Anaesthetic Techniques and Complications in Peri Operative Period.

The author claims this book to be an immense source of information to Anaesthesiologists, Health Practitioners and Students etc. The author has spent 50 years of his life as an Anaesthesiologist in India and has tried to present the “Fundamentals of Anaesthesiology”, Approaches used in Anaesthesiology, Methodologies adopted in developing countries over 25 years in a concise way.

The author firmly believes that Specialty of Anaesthesiology lies in Clinical Neurophysiology. So, it is a perfect gift to Scientific Community where unanswered questions are resolved to some extent to gain a better understanding in Anaesthesiology.

It may not be out of place to state that the authors of this book pointed out the fact that after the introduction of skeleto muscular relaxant drugs into the anaesthetic practice multiples of thousands (may be far more) started practicing anaesthesiology with various circutes to facilitate the most risky surgery by various surgical specialists & make a decent living without understanding the neurophysiological factors governing the welfare of the patient. Hence even a senior most consultant in anaesthesiology cannot satisfactorily answer the doubts/searching questions of the relatives of a patient who develops complications in peri operative period. Hence this research was undertaken & is useful to satisfy the relatives of the affected patients upto some extent.

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