Book Reviews

Researches Practical and Physiological on Etherization
N. Pirogoff (B.R. Fink trans.) Wood Library-Museum
 of Anesthesiology, 1992. pp 76. \$12.00 U.S.
 ISBN: 0-9614932-3-2

Nikolai Pirogoff (1810–1881) is remembered by anaesthetists almost entirely for his advocacy of the rectal administration of ether. On this his stand was somewhat extreme, his conviction, as early as 1847, being that this technique would “entirely” replace the inhalational in “most cases.” This, and the fact that his writings were published in French, has meant that the totality of his work on ether, of which the rectal technique was but a part, is unfamiliar to most anaesthetists. This is regrettable, for Pirogoff was a thoughtful and humane physician as well as a methodical scientist. He realized that many of his contemporaries would have to be convinced of the value of anaesthesia in these early days, and he published the results of his work in the hope that it might prove “of general benefit.”

Pirogoff based his monograph on “the results of fifty surgical operations, as well as forty experiments on healthy individuals and several experiments on animals ...” His clinical experience therefore was considerable and his research was extensive. The former enabled him to describe in some detail the effects of anaesthesia with ether, and, like John Snow, whose classic monograph on ether was published four months after Pirogoff’s, he classified the depth of anaesthesia into stages and paid careful attention to the design of apparatus. He determined the effects of ether on the body’s “economy,” concluding that “etherization, by rendering the body insensitive to traumatic pain, will probably diminish the intensity of the nervous and febrile reaction” consequent on surgery. As Snow did, Pirogoff integrated the results of his research with his clinical experience, and he likewise sought to draw conclusions about the mechanism of the action of ether. These conclusions were based on his observations of the effects of ether when applied directly to nervous tissue and when injected intravenously and intraarterially as well as when administered by inhalation – and by rectal injection. While he had to admit that “the mechanism of action of etherized arterial blood remains unknown,” he also was led to “suppose that ... ether transforms the mutual relations of the atoms of the nerve fiber.” Pirogoff’s research comprised 45 experiments, all except, for an unexplained reason, Experiment 21 being reported in this monograph, and one must agree with Fink that so

methodical a scientist as Pirogoff is entitled to greater recognition in the history of anaesthesia than he has hitherto been given.

This publication will enhance the reputation that the Wood Library-Museum enjoys as a result of its reprinting of classic monographs by early anaesthetists. It will also enhance Dr. Fink’s considerable reputation as a translator of French anaesthesia classics. In reading this translation of Pirogoff’s *Recherches*, I learned more about our Pirogoff and about our historical heritage, and I can recommend this publication to all who are interested in the byways as well as the highways of the history of the art and the science of anaesthesia.

David A.E. Shephard

Quality of Care: Issues and Challenges in the 90’s. A literature review

Mary Lou Harrigan. Published by the Canadian Medical Association, 1992. 218 pages. ISBN 0-920169-50-3. \$44.95

There is little doubt that the 1990’s will evolve as the decade wherein health care in North America is adjusted to achieve the goals of affordability and accountability, while simultaneously meeting current standards of quality. Since the assessment and adjustments to meet these ends will influence every practising physician the Canadian Medical Association must be applauded for commissioning this excellent annotated bibliography as a membership service. Dedicated to the memory of Dr. Adam Linton, the Ontario physician who inspired the medical profession to rethink its views of “Quality,” the volume serves as an invaluable primer and reference source of concepts and concerns of which we must all be aware.

While the manuscript has a Canadian origin and impetus, its relevance transcends international boundaries as it includes literature and policy statements from the USA and around the world. Concepts discussed in a succinct, most readable format include the new paradigm of continuous quality improvement, outcome evaluation, clinical practice guidelines, utilization review, and risk management. No topic is dealt with to exhaustion, but the extensive bibliography is available to expand the interested reader’s understanding. Most importantly, since it arises from Canada’s practising medical community it presents a balanced referenced opinion, with

answers (and, where appropriate, support) to the commonly expressed negative feelings of physicians to many of these evolving concepts.

Are the issues of sufficient relevance to practising anaesthetists? Clearly, a volume supporting all medical practitioners must be generic, and little specific time can be spent on any one branch of medicine. However, anaesthesia is singled out in several sections for providing leadership in issues such as practice guidelines, standards of care, and maintenance of competence. One may take exception with the oversight of the Canadian publication of guidelines to anaesthetic practice well in advance of the referenced American document, or the lack of mention that Canadian anaesthetists have been one of the few specialties to evaluate and describe the influence of litigation on medical practice. These minor oversights to the pride of the Canadian Anaesthetists' Society aside, the subject matter should be mandatory for *all* physicians. We may claim as non-primary care physicians to be without influence on issues such as resource utilization, but unless we understand clearly the issues involved we will become passive victims in the inevitable adjustments to the system in which we work.

Peter Duncan MD FRCPC
Saskatoon, Saskatchewan