Current Status of the Implication of the Clinical Practice Pattern in Hemodiatysis Prescription in Regular Ilemodialysis Patients in Egypt (Kafr El-Shikh)

Protocol of Thesis

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By

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INTRODUCTION

Studies examining the link between research evidence and clinical practice have consistently shown gaps between the evidence and current practice. Some studies in the United States suggest that 30%–40% of patients do not receive evidence-based care, while in 20% of patients care may be not needed or potentially harmful.1 However, relatively little information exists about how to apply evidence in clinical practice, and data on the effect of evidence-based guidelines on knowledge uptake, process of care or patient outcomes is limited.

In recent years, specific clinical guidelines have been developed to optimize the quality of anemia management secondary to chronic kidney diseases(CKD).As a result, the National Kidney Foundation Kidney Disease Outcome Quality Initiative (K\DOQ I) guidelines and the Renal-European Dialysis and Transplantation Association best practice guidelines have been published in USA & Europe. Therefore; clinical practice guidance help individual physician and physicians as group to improve their clinical performance and thus raise standard of patient care towards optimum levels, They may also help to insure that all institution provide an equally good base line standard of care***(Cameron,1999).***

Guidelines practiced on anemia and actual practices are much different with different places and patients according to treatment. Moreover, in individual countries and individual units within countries local circumstances relating to economic conditions; organization of health care delivery or even legal constraints may render the immediate implementation of best practice guidelines difficult or impossible. Nevertheless, they provide a goal against which progress can be measured ***(Locatelli et al., 2004).***

Dialysis Outcomes and Practice Patterns Study (DOPPS) has observed a large variation in anemia management among different countries. The main hemoglobin concentration in hemodialysis patient varied widely across the studied countries ranging between 8g/dl to 11g/dl. The percentage of prevalent hemodialysis patient receiving erythropoietin stimulating agent 'ESA' has increased from 75% to 83%. The percentage of HD patient receiving iron varies greatly among DOPPS countries range from 38% to 89% ***(Locatelli et al., 2004).***

There are challenges in implanting clinical guidelines in medical practice. Overall DOPPS data which show that, despite the availability of practice guidelines for treatment of renal anemia, wider variation in anemia management exists

as gap between what is recommended by the guidelines and is accomplished in every day clinical practice. Compliance with clinical guidelines is an importance indicator of quality and efficacy of patient care at the same time their adaptation in clinical practice may be initiated by numerous factors including; clinical experts, patient performance, constrains of public health policies, community standard, budgetary limitation and methods of feeding back information concerning current practice ***(Cameron,1999).***

AIM OF THE WORK

1. To study the pattern of current clinical practice in hemodialysis prescription in regular hemodialysis patients in Egypt and to compare this pattern with standard international guidelines in hemodialysis prescription (K/DIGO 2010), stressing on anemia, bone disease management and adequacy of dialysis.

2. Statement of the current status of dialysis patient in Egypt (questionnaire)

Chapter (1)

Hemodialysis as a renal replacement therapy.

Artificial support of the functions of failing organs has a history deeply rooted in the beginning of the last century. Although artificial respiration may have been used as early as Roman times by the physician *Galen*, and as late as 1908 by *George Poe*, support of the failing kidney began as early as 1913. Two scholars are credited repeatedly in the literature, *Dr. John J. Abel and Dr. W. J. Kolff,* as the forefathers of modern dialysis. "Vivi-diffusion" was coined in a paper given before the Association of American Physicians in 1913 in which the blood of animals was cleaned of intermediaries of metabolism. (***Abel JJ et al.,1990***).

This "vivi-diffusion" was achieved using arterial cannulation and hirudin anticoagulation in a dog with blood directed through branching glass tubing to reach a series of cellodin dialysis membranes and then back to a venous cannula. This concept was concomitantly developed by Dr. Kolff in the Netherlands and led to the first apparatus available