

# KSN 2016 Abstract Submission

## *Dialysis*

KSN2016ABS-1573

### **Current Status of Hemodiafiltration in Korea, 2015**

Sug Kyun Shin<sup>1</sup> on behalf of The Korean society of Hemodiafiltration(KSHDF), Eun Ju Kim<sup>1</sup>, Yong Kyu Lee\*, Tai Ik Chang<sup>1</sup>, Ea Wha Kang<sup>1</sup>, Yong Il Jo<sup>2</sup>, Leejin Yang<sup>3</sup>, Yongbum Choi<sup>4</sup>, Jaekil Lim<sup>5</sup>, Kwang Shik Yoon<sup>6</sup>, Sungbae Park<sup>7</sup>

<sup>1</sup>KIDNEY CENTER, ILSAN HOSPITAL NHIS, YUMC, Goyang-si, <sup>2</sup>department of internal medicine, Konkuk University school of Medicine, <sup>3</sup>Technical part, Boryung Co. Ltd, <sup>4</sup>technical part, Baxter Incorporated, <sup>5</sup>technical part, B.Braun Korea Co. Ltd, <sup>6</sup>Technical part, Fresenius Medical Care Korea, Seoul, <sup>7</sup>Department of Internal Medicine, Keimyung University School of Medicine, Daegu, Korea, Republic Of

**Background:** Hemodiafiltration (HDF) will say that it is the most advanced method of hemodialysis that may reduce the complications in long-term hemodialysis patients. Recently, in Korea, the numbers of HD patients and also dialysis machines that can perform HDF were increased. However, for the cost problem of HDF, the number of HDF patients and the HD centers did not show a big change. In KSHDF(Korean society of HDF), to target the HD center of the 2015 nationwide, the studies were performed to make sure the differences a method of performing a HDF, the number of patients, and for such clinical applications among the domestic situation and different hospital scales.

**Methods:** Hemodiafiltration is required with technical assistance from a dialysis company and water purifier company. In this study, technicians of the company have confirmed the specifications of the dialysis equipment and water purification facilities that have been installed in 711 hemodialysis centers. Clinical parameters, received the information through nephrologists or head nurses, other content, we conducted a questionnaire survey. This study was conducted for about 6 months from May to November, 2015. First of all, we divided the HD centers to 4 groups by the size of the hospitals (500-bed or more of hospital, hospital of less than 500-bed, hospital care, and private center). Proportion of HD machine being capable of performing the HDF, the proportion of patients on HDF, number of monthly HDF of total monthly HD, clinical indications for HDF, etc. were investigated in this study.

**Results:** Number of nephrologists and nurses were significantly higher in larger size of hospitals. Average number of HD machines ( $30.93 \pm 5.82$ ) were highest in group of hospital of more than 500-bed. However, numbers of HD machines being capable of HDF were not different among 4 groups. The average numbers of monthly hemodialysis in hospital of more than 500-bed ( $890.8 \pm 103.8$ ) were significantly higher compared to other groups. However, the number of monthly HDF was not different among 4 groups. In methods being performing HDF, post-dilution was 28.4%, and pre-dilution was 70.5%. Clinical indication for HDF were long-term hemodialysis (58.5%) is the most common, removal of middle uremic toxins have been 21.0%. During on HDFs, replacement volume, blood flow rates, dialysate flow rates, extra-charge for HDF, and surface area of

dialyzers were not much difference in 4 groups. Hospital care was not shown any the performance of HDF. Biological examinations for water qualities such as CFU (colony forming unit) and endotoxin were checked more frequently in private centers, but in hospital care, the number of inspections was significantly lower

**Conclusion:** The proportion of HDF patients of HD patients was 13.4% nationwide. The first reason for HDF was to prevent long-term dialysis complications. In Korea, 2015, the proportion of HDF patient and HDF machines were significantly higher in larger hospitals compared to private clinics.

**Keywords:** clinical indication, dialysis equipment, hemodiafiltration, Hemodialysis, water quality