

## 복막투석 환자의 시간경과에 따른 체성분 변화

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### Changes of Body Composition in CAPD Patients and Association with Icodextrin During Initial 3 Years

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Among new 215 CAPD patients from June 2001 to Feb. 2004 in our hospital, 79 patients (female:32, diabetes: 28, mean age:  $45.8 \pm 12.9$  years) finished 36 months protocol. Clinical indices including daily glucose absorption were measured every 6 months. Body composition was analyzed with multi-frequency bioelectrical impedance analysis (BIA, Inbody® Biospace Co., Korea, n=282) and dual energy X-ray absorption (DEXA, n=252) at the 1st, 12th, 24th and 36th month. We also compared the effect of icodextrin on body composition (ET group: 24 patients, nonET group: 53, no differences of sex, diabetics and D/P 4Cr). We analyzed the data with paired t-test and independent t-test using SPSS and multiple regression with GEE.

The results can be summarized as:

1. There was significant weight gain during 3 years ( $p < 0.01$ , annual weight gain:  $1.4 \pm 1.9$  kg/yr) and 70.1% of 3-years weight gain ( $2.96/4.21$  kg) was happened during initial 1 year.
2. Edema index (ECF/TBW) was markedly decreased during 1 year ( $0.368 \pm 0.029$ ,  $0.356 \pm 0.019$ ,  $p < 0.01$ ).
3. Fat amount, Fat %, waist/hip ratio and visceral fat area ( $15.0 \pm 6.0$  to  $17.4 \pm 6.2$  kg,  $23.7 \pm 6.9$  to  $26.1 \pm 7.3\%$ ,  $0.868 \pm 0.057$  to  $0.886 \pm 0.059$  and  $80.9 \pm 30.1$  to  $89.4 \pm 33.1$  cm<sup>2</sup>,  $p < 0.01$ , respectively) were significantly increased during initial 1 year after then decreased during 24th to 36th month ( $p < 0.05$ ).
4. ET group showed less annual weight and fat gain ( $p < 0.05$ , respectively).
5. Factors associated with the gaining of fat with time on PD were age, diabetes and female ( $p < 0.01$ ,  $p < 0.01$ ,  $p < 0.05$ , respectively).

In conclusion, there was marked fat accumulation especially during initial 1 year and the application of icodextrin might be helpful to alleviate excessive fat gaining with time on PD.