

## 계속적 외래복막투석 환자에서 복막염후 발생한 복강내 농양 2예

경북의대 내과

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1986년부터 1993년까지 경북대학교병원에서 206명의 환자가 계속적 외래복막투석(continuous ambulatory peritoneal dialysis: CAPD)을 실시하였고 418회의 복막염이 발생하였으며 이 기간 동안 2명의 환자에서 복강내 농양이 발생하였다.

이 두명은 모두 CAPD 복막염과 관계되어 발생한 복강내 농양이었으며 원인균은 1명은 녹농균, 다른 1명은 결핵균이었다. 복부 전산화단층촬영 또는 초음파 및 농양조영술로 농양을 확인한후 경피적 농양제거술을 실시하였으며 성공적으로 모두가 해결되었다.

복강내 농양은 CAPD 복막염과 관계되어 일어날 수 있으며 저자들의 예에서는 전체 복막염 발생의 0.48%에서 합병된 비교적 드문 합병증의 하나이다.

### Albumin-based solutions for peritoneal dialysis: Investigations with a rat model.

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To evaluate albumin as a osmotic agent for peritoneal dialysis, the peritoneal fluid and solute transport were investigated during a 4-hour single cycle peritoneal dialysis with albumin-based dialysis solutions. Two different albumin solutions were used in 15 normal Sprague-Dawley rats: isotonic 7.5 % albumin solution (ADS 1, n=7) and a combined 7.5 % albumin and 1.36 % glucose solution (ADS 2, n=8). A standard 1.36 % Dianeal solution was used in 6 control rats. The rate of the intraperitoneal volume change ( $Q_v$ ) was positive during the initial 90 min with ADS 2 and during the initial 60 min with Dianeal 1.36 % solution, but negative with ADS 1. The estimated rate of transcapillary ultrafiltration ( $Q_u$ ) was positive with all three solutions throughout the dialysis.  $Q_u$  with ADS 1 increased gradually during the initial 90 min and then remained stable, whereas it decreased with ADS 2 and Dianeal 1.36 % solution.  $Q_u$  with ADS 2 did not differ from that with Dianeal 1.36 % solution during the initial 60 min but it was significantly higher during the later part of dialysis. The value of  $Q_u$  during the last two hours of dialysis was similar with ADS 1 and ADS 2 and significantly higher than that with Dianeal 1.36 % solution ( $0.05 \pm 0.007$  ml/min,  $p < 0.017$ ). The peritoneal reabsorption rate,  $Q_a$ , was similar in all three groups. After 4 hours of dialysis, 21 % and 25 % of the initial amount of albumin were absorbed from the peritoneal cavity with ADS 1 and ADS 2, respectively. We conclude that albumin can be regarded as a theoretically ideal osmotic agent in peritoneal dialysis to yield prolonged ultrafiltration and to compensate protein loss during dialysis with conventional dialysis solution. However, its high cost restricts its clinical application at present. The results of the present study may be useful as reference data in the evaluation of other alternative osmotic agents.