

## Department of Blood Purification

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### (1) Education

The Department of Blood Purification has been engaged in such educational activities as follows.

- 1) Clinical clerkship of 5<sup>th</sup> and 6<sup>th</sup> year students of Medical School
- 2) Clinical lectures of 4<sup>th</sup> year students of Medical School
- 3) Lectures of postgraduate master course students of Medical School
- 4) Clinical lectures of 2<sup>nd</sup> year students of School of Health Sciences
- 5) Hospital training of postgraduate master course students of Medical School (50 students)
- 6) Hospital training of dialysis therapy (4 trainees)
- 7) Hospital training of clinical engineering technologists (6 trainees)

### (2) Research

The Department of Blood Purification has been engaged in such research activities as follows.

- 1) Pathophysiology and treatment of chronic renal failure
- 2) Pathophysiology and treatment of acute renal failure
- 3) New techniques in blood purification

### (3) Clinical Services

The achievements of clinical services of The Department of Blood Purification in 2009 are as follows.

- 1) Hemodialysis (HD)
 

Number of newly started HD patients	62
Number of maintenance HD patients	271
Total number of HD sessions	4224
- 2) Plasma exchange (PE)
 

Number of PE sessions	139
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- 4) Blood absorption
 

Number of sessions	64
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- 5) Acute renal failure
 

Number of patients	25
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- 6) Multiple organ failure
 

Number of patients	11
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- 7) Number of clinical departments involved in blood purification 24

### (4) Publications

#### Original Articles

1. Satoh F, Okado T, Iwamoto M, Akita W, Wakabayashi M, Ohta A, Sohara E, Noda Y, Rai T, Uchida S, Sasaki S. Calcium-alkali syndrome-like symptoms manifested by daily alphacalcidol and thiazide. *Intern. Med.* 49:837-40, 2010.
2. Sugawara N, Morimoto T, Farajov EI, Kumagai N, Aslanova UF, Rai T, Uchida S, Sasaki S, Tsuchiya S, Kondo Y. Calcium and calcimimetics regulate paracellular Na<sup>+</sup> transport in the thin ascending limb of Henle's loop in mouse kidney. *Pflugers Arch.* 460:197-205, 2010.
3. Talati G, Ohta A, Rai T, Sohara E, Naito S, Vandewalle A, Sasaki S, Uchida S. Effect of angiotensin II on the WNK-OSR1/SPAK-NCC phosphorylation cascade in cultured mpkDCT cells and in vivo mouse kidney. *Biochem. Biophys. Res. Commun.* 393:844-8, 2010.
4. Yang SS, Hsu YJ, Chiga M, Rai T, Sasaki S, Uchida S, Lin SH. Mechanisms for hypercalciuria in pseudohypaldosteronism type II-causing WNK4 knock-in mice. *Endocrinology.* 151:1829-36, 2010.
5. Yashima T, Noguchi Y, Kawashima Y, Rai T, Ito T, Kitamura K. Novel ATP6V1B1 mutations in distal renal tubular acidosis and hearing loss. *Acta. Otolaryngol.* 130:1002-8, 2010.