## Clinical Report 2 (Japan)

Effective Treatment of Gouty Nephropathy Induced Chronic Renal Failure with the "Yojinkodakuto(Nourishing the Kidney and Depressant Turbid Dampness Decoction)" Yoichiro Ebe

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Patient: 51 years, male First visit: October 28, 2004 Underlying disease: gouty nephropathy Anamnesis: hyperuricemia Present illness:

The patient had been treated for gout at a different clinic for about 10 years and approximately 4 years ago renal failure had been pointed out. In December 2003, the serum creatinine level was 4.8 mg/dl, but had increased to 5.1 mg/dl by October 27, 2004, when the patient visited our clinic. Treatment in the other clinic consisted of diet (protein restriction to 30-40 g protein per day) and treatment with Espo (epoetin alfa) injections, 4 g of Kremezin (spherical carbonaceous absorbent) per day), Norvasc (amlodipine besilate), Persantin (dipyridamole) and Zyloric (allopurinol).

**Current condition, others:** height 170 cm, weight 66 kg Dry mouth (-), cranial symptoms (-), thoracic symptoms (-), gastric symptoms (-), abdominal symptoms (-), cold feet (-), easy fatigability (-), normal stools, small urine volume.

BUN 32.3 mg/dl  $\,$  Cr4.8 mg/dl  $\,$  K4.4 mEq/l  $\,$ 

Pulse: thin, slippery; left-sided wiry and slippery Tongue: faint pale red, white fur

## **Prescription**:

<i>Astragali</i> Radix	20g
<i>Hedysarum</i> Radix	12g
<i>Paeoniae</i> Radix	15g
<i>Smilacis</i> Rhizoma	30g
<i>Dioscoreae Hypoglaucae</i> Rhizoma	10g
Atractyrodis Rhizome	15g
Poria	15g
<i>Ostreae</i> Testa	15g
<i>Pinellia</i> Tuber	15g
Trichosanthes Semen	10g
<i>Salviae Miltiorrhizae</i> Radix	12g
Zingiberis Rhizoma Processum	6g
<i>Rhei</i> Rhizoma	$2\mathbf{g}$
Aconiti Radix Processa	3g
Treatment for 14 days	

Continued treatment with Kremezin.

**Course:** On November 11, 2004: BUN 32.9 mg/dl, Cr4.9 mg/dl, K3.7 mEq/l

No marked changes. Constipation

Prescription: same prescription (excluding *Ostreae* Testa and *Aconiti* Radix Processa, adding 10 g of *Polyporus*, 12 g of *Stephania tetrandra* Radix, 6 g of *Glycyrrhiza* glabra); modified to use 30 g *Astragali* Radix and 1 g of *Rhei* Rhizoma.

BUN 43.9 mg/dl; Cr4.2 mg/dl K3.9 mEq/l

Heavy feeling on the stomach (+), decreased appetite (+)

Prescription: same prescription (adding 6 g of *Foeniculi* Fructus, 10 g of *Tritici* Fructus)

Treatment for 14 days

Considering the possibility that the Kampo medicine may be adsorbed to Kremezin, the 2 g of the drug is taken before sleep.

December 17, 2004

BUN 46.7 mg/dl Cr4.2 mg/dl K3.5 mEq/l

Prescription: same prescription (excluding *Stephania* tetrandra Radix); modified to use 4.5 g of *Glycyrrhizae* Rhizoma and 0.5 g of *Rhei* Rhizoma.

Treatment for 7 days.

Discontinued Kremezin.

December 24, 2004

BUN 44.4 mg/dl Cr3.8 mg/dl K4.0 mEq/l

After that the patient came once every two weeks for consultation and examination, but each time both creatinine and BUN levels, 3.3 - 3.5 mg/dl and 35 - 40 mg/dl respectively, remained stable (as of May 25, 2006) (see Table 1)

Prescription on May 25, 2006

Astragali Radix	30g
Paeoniae Radix	15g
<i>Smilacis</i> Rhizoma	30g
<i>Dioscoreae Hypoglaucae</i> Rhizo	ma 10g
<i>Salviae Miltiorrhizae</i> Radix	12g
<i>Glycyrrhizae</i> Radix	$6 \mathbf{g}$
<i>Pinellia</i> Tuber	15g
Atractyrodis Rhizoma	10g
Poria	10g
<i>Salviae Miltiorrhizae</i> Radix	12g
<i>Tritici</i> Fructus (Malt)	10g
<i>Foeniculi</i> Fructus	$6 \mathbf{g}$
Silkworm Excrement	10g

## Discussion

This was a patient with gouty nephropathy and an underlying chronic renal failure treated with "Nourishing the Kidney and Depressant Turbid Dampness Decoction". The amounts of component crude drugs in the formula were modified as required and the patient observed over a period of more than 1.5 years, during which time the serum creatinine concentration could be decreased form 4.8 mg/ml to 3.3 - 3.5 mg/dl. This preparation is effective regardless of the underlying disease, but here it could be confirmed that it is also effective for renal failure caused by gouty nephropathy. When the Kremezin used up to that time was discontinued during the course, a decrease in the creatinine level was observed. Based on these results I believe that Kremezin may have adsorbed the Kampo medicine and thus weakened its effects. These results clearly indicate that serum creatinine levels can be sufficiently lowered even without the use of adsorbents.

Number of visits	Examination days	BUN	Cr	K	Р	UA	TP	ALB	Hb	1/Cr	$\mathbf{CCr}$
0	04.10.28	32.3	4.8	4.4	3.9	9.5	8.0	4.6	12.1	0.208	17.0
14	04.11.11	32.9	4.9	3.7	4.4	9.4	7.2	4.1	10.9	0.204	16.6
42	04.12.09	43.9	4.2	3.9	4.8	8.3	7.6	4.3	10.7	0.238	19.4
50	04.12.17	46.7	4.2	3.5	3.9	7.9	7.5	4.3	0	0.238	19.4
57	04.12.24	44.4	3.8	4.0	4.5	7.6	7.7	4.5	0	0.263	21.5
80	05.01.16	41.5	4.1	3.8	3.9	7.3	7.6	4.4	10.9	0.244	19.7
84	05.01.20	34.2	3.9	4.2	4.6	6.8	7.5	0	11.0	0.256	20.7
98	05.02.03	26.0	3.8	4.1	4.1	7.1	7.4	4.4	11.1	0.263	21.2
112	05.02.17	34.7	3.9	4.3	4.2	7.2	7.1	4.3	10.7	0.256	20.7
126	05.03.03	30.5	3.8	3.8	3.9	6.9	7.0	4.2	10.9	0.263	21.2
140	05.03.17	32.7	3.8	4.1	4.7	6.5	7.2	4.2	11.4	0.263	21.2
154	05.03.31	37.2	3.6	3.9	4.9	6.8	6.7	3.8	11.0	0.278	22.4
168	05.04.14	33.1	3.5	3.9	4.2	6.9	6.3	3.8	11.1	0.286	23.0
182	05.04.28	32.2 20 9	3.6 9.5	4.1	4.Z	6.5 7.0	6.0 7.0	3.6 4 1	10.7	0.278	22.4
196	05.05.12	36.2	3.0 9 <b>r</b>	4.2	3.6 4 1	7.0	1.0	4.1	10.8	0.286	23.0
210	05.05.26	34.7 27.0	3.0 9.7	4.2	4.1	6.0	6.9 7 1	4.1	11.1	0.286	23.0
224	05.06.09	57.9 25 4	୦.୮ ୨୦	4.0	4.2	1.1	$7.1 \\ 7.0$	4.2	11.4	0.27	21.0 21.2
250	05.00.23 05.07.07	00.4 11 1	ม.0 21	4.0	4.0 2.4	0.0 6 5	6.2	$\frac{4.2}{2.7}$	11.4	0.203	21.2
252 247	05.07.07 05.07.02	39 4	3.1	4.0 3 9	3.4	6.6	6.8	39	10.5	0.525 0.286	20.0 23.0
280	05.08.04	38.1	3.6	43	4.0	8.0	7.0	4 1	11.6	0.200 0.278	$\frac{20.0}{22.4}$
294	05.08.18	35.6	3.4	3.8	2.7	7.1	6.8	4.0	11.0	0.294	23.7
308	05.09.01	34.4	3.2	3.9	3.2	6.3	6.9	4.0	10.8	0.313	25.2
322	05.09.15	35.9	3.4	3.7	2.8	6.7	6.7	4.0	10.4	0.294	23.7
336	05.09.29	38.1	3.4	4.0	3.4	6.7	6.8	4.0	10.8	0.294	23.7
350	05.10.13	37.4	3.5	4.3	3.4	6.7	6.9	4.0	10.2	0.286	23.0
364	05.1027	34.4	3.3	4.2	3.2	6.9	6.6	3.9	10.2	0.303	24.4
378	05.11.10	34.0	3.4	3.9	2.6	6.2	6.8	4.0	10.1	0.294	23.7
385	05.11.17	29.7	3.3	3.9	2.0	8.5	7.1	4.2	10.3	0.303	24.4
399	05.12.01	34.1	3.5	4.5	3.3	7.1	7.5	4.4	11.2	0.286	23.0
413	05.12.15	31.9	3.4	3.8	3.1	5.9	6.9	4.0	9.6	0.294	23.7
441	06.01.12	35.9	3.6	3.7	2.9	6.1	6.8	4.0	9.9	0.278	22.2
455	06.01.26	35.8	3.3	3.5	3.3	5.2	6.8	4.0	10.1	0.303	24.2
469	06.02.09	36.0	3.4	4.1	3.4	6.0	7.5	4.3	10.3	0.294	23.5
483	06.02.23	36.9	3.3	3.7	3.2	6.5	7.0	3.9	10.1	0.303	24.2
497	06.03.09	36.3	3.3	4.2	3.2	6.8	7.5	4.4	10.2	0.303	24.2
511	06.03.23	38.1	3.4	3.8	3.0	6.5	6.9	4.0	9.9	0.294	23.5
525	06.04.06	39.6	3.3	3.9	3.8	6.5	7.0	4.0	9.9	0.303	24.2
539	06.04.20	41.0	3.4	4.1	4.0	6.5	7.2	4.0		0.294	23.5
560	06.05.11	43.6	3.5	4.1	4.6	6.8	7.4	4.3	10.1	0.286	22.8
574	06.05.25	40.1	3.5	3.7	3.1	6.1	6.8	3.8	9.9	0.286	22.8

Table 1: Fluctuations in laboratory values of this patient