

\*, \*

Feldman 2)

6.

가

가

45

45

1-4).

가

1.

1997 11 1998 8

(Michigan

Diabetic Neuropathy Score, MDNS)

가

2

90

( 45 , 45 )

2.

가

가

가

Feldman 2)

MDNS

46

7

5

(

, )

: 1999 2 24

: 1999 4 21

2

(Table 1).  
 가  
 5 28.9%  
 33.3% 가  
 82.2% 가

48.6%, 69.5% (Table 3).

**Table 3.**

	(%)	
1	75.6	33.3
2	48.9	80.0
3	46.7	73.3
4	60.0	77.8
5	28.9	82.2
6	31.1	66.7
7	48.9	73.3
	48.6	69.5

t- test ± Student's  
 0.05 ( ) / ) ( / ) (%)

**Table 1.**

1
2
3
4
5
6
7

**Table 4**

가  
 93.3% 26.7%  
 , 7가  
 2.2% 100.0%  
 3  
 가 66.7% 53.3%

**Table 4.**

	(%)	
1	93.3	26.7
2	82.2	35.6
3	66.7	53.3
4	40.0	77.8
5	35.6	93.3
6	22.2	100.0
7	2.2	100.0

가  
 (Table 2).  
 가  
 75.6% 가 가

**Table 2.**

	(45 )	(45 )
(year)	53.0 ± 10.6	48.8 ± 11.1
(kg/m <sup>2</sup> )	24.0 ± 3.3	24.0 ± 2.8
(month)	108.2 ± 63.0*	58.0 ± 55.3
(mg/dL)	212.4 ± 78.5**	174.8 ± 55.5
(%)	9.4 ± 2.0**	8.4 ± 1.8

: ± , \*: p<0.05, \*\*: p<0.01

가 , P-riat 4,400  
 25 7.5% 45%  
 7).

70 79  
44.2% , 8, 9, 5)  
10) (impotence), , 5)  
48.9% ( : 46.5%), 61.3% ( :  
59.8%), 39.0% . 11) , , ,

19% 가  
가  
가 (small nerve  
fiber), (large nerve fiber) (MDNS) 가

(hyperalgesia),  
, 가  
, 가  
가 가

1-4). Feldman 2)  
(MNSIQ)  
가 12.8%  
가 6). 가

12).  
가 75.6%  
46.7 60.0% 가  
4가 가  
가

7가  
가 31.1 75.6%, 가 33.3 82.2%  
가  
가 28.9 48.9% 가 3가  
가 59.1% Feldman 2) (MNSIQ)  
가 66.7%,  
1 7가

(sensory ataxia), , 1 2 가 80%  
5 7 90%

= Abstract =

**Efficacy of questionnaire for  
the diagnosis of diabetic peripheral  
neuropathy in Koreans**

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**Background :** Discrepancies exist in the currently available data on the prevalence of diabetic neuropathy. Variations in the prevalence of diabetic neuropathy have reflected the different criteria used to form its diagnosis. The majority of diagnostic criteria are less practical in many routine clinical settings where there is a need for a simple assessment using widely available techniques to rapidly screen large numbers of patients. We already reported that the questionnaire of Feldman's two-step assessment was less useful in Koreans, because of the different expression of neuropathic symptoms. We proposed a representative questionnaire which was based on patients' own complaints, and assessed its clinical availability.

**Methods :** Ninety diabetic patients(45 cases with diabetic neuropathy, 45 cases without neuropathy) were included in this study. Diabetic neuropathy was diagnosed by neurologic examination and nerve conduction velocity. The questionnaire consisted of 7 questions on foot sensation (prickling, lancinating, burning, numb), which are frequent complaints of diabetic patients. All subjects were assessed with the questionnaire.

**Results :**

1. The most sensitive symptom was tingling sensation (75.6%) and the least sensitive one was numbness(28.9%).
2. The most specific symptom was numbness(82.2%) and the least specific one was tingling sensation(33.3%).
3. If we would assume that three or more of symptoms were diagnostic, the sensitivity and specificity were 66.7% and 53.3%, respectively.

**Conclusion :** Our new questionnaire can be used as a screening test or a follow-up tool for the diagnosis of diabetic peripheral neuropathy in Koreans.

가  
Feldman 2  
1  
: 1997 11 1998 8  
(MDNS) (NCV) 가  
2 90 ( 45 ,  
45 )  
Feldman MDNS NCV 가  
가  
: 가 77가  
가 가 75.6%  
가 가  
28.9%  
33.3% 가  
82.2% 가  
가  
66.7% , 53.3%  
:

**Key Words** : Diabetic peripheral neuropathy, Questionnaire

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