

2005.07.01

手指皮膚温検査(暫定)

	Right					Left				
	Cut-off point		Sensitivity (%)		Specificity (%)	Cut-off point		Sensitivity (%)		Specificity (%)
	Min	Mean-sd (°C)	VWF	NOVWF	CONTROL	Mean-sd (°C)	VWF	NOVWF	CONTROL	
			n=10	n=23	n=25		n=11	n=21	n=25	
Before 1	25.81		50.0	21.7	84.0	25.5	36.4	23.8	80.0	
2	25.99		50.0	21.7	80.0	25.6	36.4	28.6	76.0	
3	26.06		50.0	21.7	80.0	25.6	36.4	28.6	76.0	
4	26.09		50.0	26.1	84.0	25.5	36.4	28.6	72.0	
5	26.24		50.0	21.7	84.0	25.5	36.4	28.6	76.0	
During 1	18.26		50.0	26.1	80.0	17.6	36.4	23.8	84.0	
2	15.53		40.0	17.4	84.0	15.3	36.4	23.8	88.0	
3	13.85		20.0	17.4	96.0	13.7	27.3	9.5	96.0	
4	12.80		0.0	0.0	100.0	12.8	9.1	0.0	100.0	
5	12.23		0.0	0.0	100.0	12.3	0.0	0.0	100.0	
After 1	12.87		0.0	0.0	100.0	13.1	0.0	0.0	100.0	
2	12.85		0.0	0.0	100.0	13.1	0.0	0.0	100.0	
3	13.00		0.0	0.0	100.0	13.0	0.0	0.0	100.0	
4	13.32		0.0	0.0	100.0	13.3	0.0	0.0	100.0	
5	13.51		0.0	0.0	100.0	13.6	0.0	0.0	100.0	
6	13.76		0.0	0.0	100.0	13.8	0.0	0.0	100.0	
7	14.13		0.0	0.0	100.0	14.2	0.0	0.0	100.0	
8	14.39		0.0	0.0	100.0	14.5	0.0	0.0	100.0	
9	14.72		0.0	0.0	100.0	14.8	0.0	0.0	100.0	
10	15.04		0.0	0.0	100.0	15.1	0.0	0.0	100.0	
11	15.30		0.0	0.0	100.0	15.3	0.0	0.0	100.0	
12	15.51		0.0	0.0	96.0	15.5	0.0	0.0	100.0	
13	15.87		10.0	0.0	96.0	15.9	0.0	0.0	100.0	
14	15.84		10.0	0.0	100.0	16.0	0.0	0.0	100.0	
15	16.08		10.0	0.0	100.0	16.3	0.0	0.0	100.0	

## 手指血圧検査 (暫定集計)

## Sensitivity and specificity of the test involving FSBP% (data on right hands of patients and controls)

	Test conditions	Room t °C	VWF(+) controls	VWF(-) controls	Diagnostic criteria, FSBP% Cutoff point	Sensitivity (VWF(+) group) %	False positive (VWF(-) group) %	Specificity (VWF(-)+ control) %	Specificity % (control group)
Ekenvall & (1986) <sup>a</sup>	30, 15, 10°C	16	111	15/14	<60	74		Not reported	
Bovenzi (1993) <sup>bc</sup>	30, 15, 10°C	22-23	65	31	<60	84		98	
Bovenzi (1998) <sup>c</sup>	30, 15, 10°C	21-23	141	681/455	<70, <60	100, 85.8		90, 93.7	
Bovenzi (1998) <sup>c</sup>	30, 15, 10°C	21-23	151	723/455	<60	87		94	
Virokannas (1991) <sup>c</sup>	30, 10°C	20-23	37	20/17	<60, <76	38, 50		97, 84	
Olsen (1982) <sup>ac</sup>	30, 15, 6°C	15			<57	100		58	
Olsen (1988) <sup>ac</sup>	30, 15, 6°C	18	23	56/15	<58	96		64	
Olsen (2000) <sup>a</sup>					<58	99		94	
Kurozawa (1991) <sup>a</sup>					<90	82		90	
Kurozawa (1992) <sup>a</sup>					<80	88		77	
Calculations considering result on any finger of a subject at cuff-water temperature of 15°C									
This project <sup>bd</sup>	30, 15°C	21±1	9 <sup>s</sup>	14 <sup>s</sup> /22 <sup>s</sup>	<58.3 <sup>e</sup>	44.4	0.0		100.0
This project <sup>bd</sup>	30, 15°C	21±1	7 <sup>s</sup>	16 <sup>s</sup> /22 <sup>s</sup>	<58.3 <sup>e</sup>	57.1	0.0		100.0
Calculations considering result on any finger of a subject at cuff-water temperature of 10°C									
This project <sup>bd</sup>	30, 15°C	21±1	9 <sup>s</sup>	13 <sup>s</sup> /22 <sup>s</sup>	<54.7 <sup>g</sup>	55.6	7.7		86.4
This project <sup>bd</sup>	30, 15°C	21±1	7 <sup>s</sup>	15 <sup>s</sup> /22 <sup>s</sup>	<54.7 <sup>g</sup>	71.4	6.7		86.4
15°C index									
This project <sup>bd</sup>	30, 15°C	21±1	9 <sup>f</sup>	14 <sup>f</sup> /22 <sup>f</sup>	<58.3 <sup>e</sup>	22.2	0.0		100.0
This project <sup>bd</sup>	30, 15°C	21±1	7 <sup>f</sup>	16 <sup>f</sup> /22 <sup>f</sup>	<58.3 <sup>e</sup>	28.6	0.0		100.0
middle									
This project <sup>bd</sup>	30, 15°C	21±1	9 <sup>f</sup>	12 <sup>f</sup> /22 <sup>f</sup>	<58.3 <sup>e</sup>	33.3	0.0		100.0
This project <sup>bd</sup>	30, 15°C	21±1	7 <sup>f</sup>	14 <sup>f</sup> /22 <sup>f</sup>	<58.3 <sup>e</sup>	42.6	0.0		100.0
ring									
This project <sup>bd</sup>	30, 15°C	21±1	9 <sup>f</sup>	14 <sup>f</sup> /22 <sup>f</sup>	<58.3 <sup>e</sup>	22.2	0.0		100.0
This project <sup>bd</sup>	30, 15°C	21±1	7 <sup>f</sup>	16 <sup>f</sup> /22 <sup>f</sup>	<58.3 <sup>e</sup>	28.6	0.0		100.0
little									
This project <sup>bd</sup>	30, 15°C	21±1	8 <sup>f</sup>	15 <sup>f</sup> /22 <sup>f</sup>	<58.3 <sup>e</sup>	0.0	0.0		100.0
This project <sup>bd</sup>	30, 15°C	21±1	6 <sup>f</sup>	17 <sup>f</sup> /22 <sup>f</sup>	<58.3 <sup>e</sup>	0.0	0.0		100.0
Calculations considering results on four fingers together at cuff-water temperature of 15°C									
This project <sup>bd</sup>	30, 15°C	21±1	35 <sup>f</sup>	55 <sup>f</sup> /88 <sup>f</sup>	<58.3 <sup>e</sup>	20.0	0.0		100.0
This project <sup>bd</sup>	30, 15°C	21±1	27 <sup>f</sup>	63 <sup>f</sup> /88 <sup>f</sup>	<58.3 <sup>e</sup>	25.9	0.0		100.0
10°C index									
This project <sup>bd</sup>	30, 10°C	21±1	9 <sup>f</sup>	13 <sup>f</sup> /22 <sup>f</sup>	<54.7 <sup>g</sup>	44.4	0.0		100.0
This project <sup>bd</sup>	30, 10°C	21±1	7 <sup>f</sup>	15 <sup>f</sup> /22 <sup>f</sup>	<54.7 <sup>g</sup>	42.9	0.0		100.0
middle									
This project <sup>bd</sup>	30, 10°C	21±1	8 <sup>f</sup>	10 <sup>f</sup> /22 <sup>f</sup>	<54.7 <sup>g</sup>	25.0	10.0		95.5
This project <sup>bd</sup>	30, 10°C	21±1	6 <sup>f</sup>	11 <sup>f</sup> /22 <sup>f</sup>	<54.7 <sup>g</sup>	33.3	8.3		95.5
ring									
This project <sup>bd</sup>	30, 10°C	21±1	9 <sup>f</sup>	12 <sup>f</sup> /22 <sup>f</sup>	<54.7 <sup>g</sup>	11.1	0.0		100.0
This project <sup>bd</sup>	30, 10°C	21±1	7 <sup>f</sup>	14 <sup>f</sup> /22 <sup>f</sup>	<54.7 <sup>g</sup>	14.3	0.0		100.0
little									
This project <sup>bd</sup>	30, 10°C	21±1	8 <sup>f</sup>	14 <sup>f</sup> /22 <sup>f</sup>	<54.7 <sup>g</sup>	0.0	0.0		100.0
This project <sup>bd</sup>	30, 10°C	21±1	6 <sup>f</sup>	16 <sup>f</sup> /22 <sup>f</sup>	<54.7 <sup>g</sup>	0.0	0.0		100.0
Calculations considering results on four fingers together at cuff-water temperature of 10°C									
This project <sup>bd</sup>	30, 10°C	21±1	34 <sup>f</sup>	49 <sup>f</sup> /88 <sup>f</sup>	<54.7 <sup>g</sup>	20.6	2.0		98.9
This project <sup>bd</sup>	30, 10°C	21±1	26 <sup>f</sup>	56 <sup>f</sup> /88 <sup>f</sup>	<54.7 <sup>g</sup>	23.1	3.5		98.9

<sup>s</sup>Subject; <sup>a</sup>Body and finger cooling; <sup>b</sup>Finger cooling only; <sup>c</sup>Supine; <sup>d</sup>Sitting; <sup>e</sup>Controls but data at 15°C (n = 88); <sup>f</sup>Number of fingers; <sup>g</sup>Controls but data at 10°C (n = 88). Cutoff point = mean-2SD.

Sensitivity and specificity of the test involving FSBP% (data on patient's left hand and control's right hand)

	Test conditions	Room t °C	VWF(+)	VWF(-)/controls	Diagnostic criteria, FSBP% cutoff point	Sensitivity (VWF(+ group) %)	False positive (VWF(-) group) %	Specificity (VWF(-)+ control) %	Specificity % (control group)
Ekenvall & (1986) <sup>a</sup>	30, 15, 10°C	16	111	15/14	<60	74		Not reported	
Bovenzi (1993) <sup>bc</sup>	30, 15, 10°C	22-23	65	31	<60	84		98	
Bovenzi (1998) <sup>c</sup>	30, 15, 10°C	21-23	141	681/455	<70, <60	100, 85.8		90, 93.7	
Bovenzi (1998) <sup>c</sup>	30, 15, 10°C	21-23	151	723/455	<60	87		94	
Virokannas (1991) <sup>c</sup>	30, 10°C	20-23	37	20/17	<60, <76	38, 50		97, 84	
Olsen (1982) <sup>ac</sup>	30, 15, 6°C	15			<57	100		58	
Olsen (1988) <sup>ac</sup>	30, 15, 6°C	18	23	56/15	<58	96		64	
Olsen (2000) <sup>a</sup>					<58	99		94	
Kurozawa (1991) <sup>a</sup>					<90	82		90	
Kurozawa (1992) <sup>a</sup>					<80	88		77	
Calculations considering result on any finger of a subject at cuff-water temperature of 15°C									
	This project <sup>bd</sup>	30, 15°C	21±1	4 <sup>s</sup>	14 <sup>s</sup> /22 <sup>s</sup>	<58.3 <sup>e</sup>	50.0	14.3	100.0
Calculations considering result on any finger of a subject at cuff-water temperature of 10°C									
	This project <sup>bd</sup>	30, 10°C	21±1	4 <sup>s</sup>	11 <sup>s</sup> /22 <sup>s</sup>	<54.7 <sup>g</sup>	25.0	18.2	86.4
15°C index									
	This project <sup>bd</sup>	30, 15°C	21±1	3 <sup>f</sup>	15 <sup>f</sup> /22 <sup>f</sup>	<58.3 <sup>e</sup>	66.7	0.0	100.0
middle									
	This project <sup>bd</sup>	30, 15°C	21±1	3 <sup>f</sup>	13 <sup>f</sup> /22 <sup>f</sup>	<58.3 <sup>e</sup>	0.0	7.7	100.0
ring									
	This project <sup>bd</sup>	30, 15°C	21±1	4 <sup>f</sup>	14 <sup>f</sup> /22 <sup>f</sup>	<58.3 <sup>e</sup>	25.0	7.7	100.0
little									
	This project <sup>bd</sup>	30, 15°C	21±1	4 <sup>f</sup>	14 <sup>f</sup> /22 <sup>f</sup>	<58.3 <sup>e</sup>	0.0	0.0	100.0
Calculations considering results on four fingers together at cuff-water temperature of 15°C									
	This project <sup>bd</sup>	30, 15°C	21±1	14 <sup>f</sup>	56 <sup>f</sup> /88 <sup>f</sup>	<58.3 <sup>e</sup>	21.4	3.6	100.0
10°C index									
	This project <sup>bd</sup>	30, 10°C	21±1	3 <sup>f</sup>	12 <sup>f</sup> /22 <sup>f</sup>	<54.7 <sup>g</sup>	0.0	8.3	100.0
middle									
	This project <sup>bd</sup>	30, 10°C	21±1	3 <sup>f</sup>	10 <sup>f</sup> /22 <sup>f</sup>	<54.7 <sup>g</sup>	0.0	10.0	95.5
ring									
	This project <sup>bd</sup>	30, 10°C	21±1	4 <sup>f</sup>	11 <sup>f</sup> /22 <sup>f</sup>	<54.7 <sup>g</sup>	25.0	0.0	100.0
little									
	This project <sup>bd</sup>	30, 10°C	21±1	4 <sup>f</sup>	11 <sup>f</sup> /22 <sup>f</sup>	<54.7 <sup>g</sup>	0.0	0.0	100.0
Calculations considering results on four fingers together at cuff-water temperature of 10°C									
	This project <sup>bd</sup>	30, 10°C	21±1	14 <sup>f</sup>	44 <sup>f</sup> /88 <sup>f</sup>	<54.7 <sup>g</sup>	7.1	4.5	98.9

<sup>s</sup>Subject; <sup>a</sup>Body and finger cooling; <sup>b</sup>Finger cooling only; <sup>c</sup>Supine; <sup>d</sup>Sitting; <sup>e</sup>Controls but data at 15°C (n = 88); <sup>f</sup>Number of fingers; <sup>g</sup>Controls but data at 10°C (n = 88). Cutoff point = mean-2SD.

## 振動感覚閾値検査(暫定)

右手	n	HVLab 31.5Hz (基準値:117dB)					HVLab 125Hz (基準値:130dB)					RION (基準値:125dB)	
		母指	示指	中指	環指	小指	母指	示指	中指	環指	小指	n	中指
VWF(+)	7											4	
positive/n		4/7	4/7	6/7	6/7	5/7	3/7	5/7	6/7	7/7	6/7		3/4
敏感度(%)		57.1	57.1	85.7	85.7	71.4	42.9	71.4	85.7	100	85.7		75
VWF(-)	11											11	
positive/n		8/11	7/11	9/11	9/11	10/11	8/11	8/11	9/11	9/11	10/11		10/11
敏感度(%)		72.7	63.6	81.8	81.8	90.9	72.7	72.7	81.8	81.8	90.9		90.9
VWF(+)+VWF(-)	18											15	
positive/n		12/18	11/18	15/18	15/18	15/18	11/18	13/18	15/18	16/18	16/18		13/15
敏感度(%)		66.7	61.1	83.3	83.3	83.3	61.1	72.2	83.3	88.9	88.9		86.7
コントロール	24											17	
negative/n		1/24	1/24	1/24	0/24	2/24	0/24	0/24	1/24	0/24	4/23		0/17
特異度(%)		95.8	95.8	95.8	100	91.7	100	100	95.8	100	82.6		100

\* RIONの中指は(上昇閾値+下降閾値)/2を使用

左手	n	HVLab 31.5Hz (基準値:117dB)					HVLab 125Hz (基準値:130dB)					RION (基準値:125dB)	
		母指	示指	中指	環指	小指	母指	示指	中指	環指	小指	n	中指
VWF(+)	6											4	
positive/n		4/6	4/6	3/6	4/6	4/6	4/6	4/6	4/6	4/6	4/6		3/4
敏感度(%)		66.7	66.7	50	66.7	66.7	66.7	66.7	66.7	66.7	66.7		75
VWF(-)	12											12	
positive/n		9/12	10/12	10/12	11/12	9/12	7/12	8/12	9/12	9/12	10/12		10/12
敏感度(%)		75	83.3	83.3	91.7	75	58.3	66.7	75	75	83.3		83.3
VWF(+)+VWF(-)	18											16	
positive/n		13/18	14/18	13/18	15/18	13/18	11/18	12/18	13/18	13/18	14/18		13/16
敏感度(%)		72.2	77.8	72.2	83.3	72.2	61.1	66.7	72.2	72.2	77.8		81
コントロール	2											2	
negative/n		0/2	0/2	0/2	0/2	0/2	0/2	0/2	0/2	0/2	0/2		0/2
特異度(%)		100	100	100	100	100	100	100	100	100	100		100

\* RIONの中指は(上昇閾値+下降閾値)/2を使用