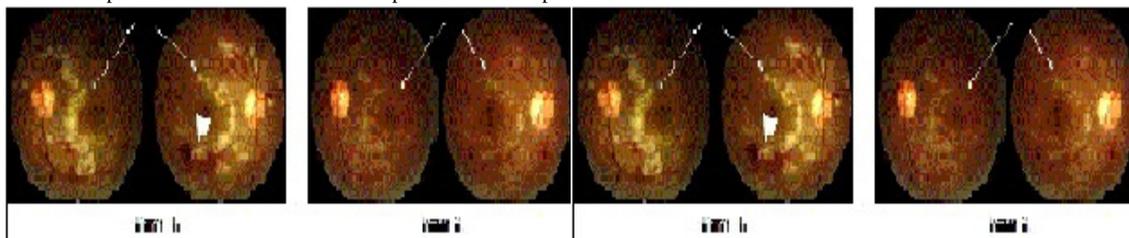


Acute pancreatitis with Purtscher's retinopathy

동국대학교 일산병원

*남성은, 장동기, 이준규

Introduction: Purtscher's retinopathy is a hemorrhagic and vasoocclusive vasculopathy. It has been associated with traumatic injury and can be also developed in a variety conditions such as acute pancreatitis, chronic renal failure, and connective tissue diseases. Retinal arteriolar occlusion by complement-mediated leukoembolization is the proposed pathogenic mechanism. **Case:** A 28 year old man with chronic alcoholism was referred to the hospital because of acute pancreatitis, considering elevated amylase(237 IU/L) and lipase(803 IU/L) level. On the second day of hospitalization, he complained of a sudden visual disturbance. Slit lamp examination and intraocular pressures were normal. Ophthalmoscopic examination of the fundus revealed diffuse retinal whitening of the posterior pole with confluent cotton wool spots(Figure 1). The arterioles were narrowed, and there were a few superficial hemorrhages (Figure 1). These findings were compatible with Purtscher-like retinopathy. After supportive care, he was recovered from acute pancreatitis. His visual disturbance was also improved significantly, and follow up ophthalmoscopic examination showed marked improvement of retinopathy(Figure 2). **Conclusion:** Purtscher's retinopathy is a rare complication of acute pancreatitis. This ocular complication demonstrates the multi system involvement of acute pancreatitis. No particular therapy has been proposed other than the treatment of the underlying condition. Careful observation of ocular problem should be considered in a patient with acute pancreatitis.



Relationship Between Physical Fitness Level and Brachial-Ankle Pulse wave velocity in Elderly People

¹성균관대학교 의과대학 강북삼성병원 내과학교실 순환기내과, ²성균관대학교 스포츠과학과, ³한국스포츠개발원

*유태경, 이종영, 박수현, 석보금, 박세정

Purpose: Physical fitness is well known as a strong predictor of atherosclerotic cardiovascular disease and mortality. However, only few studies have been conducted to reveal the relationship between physical fitness and brachial-ankle pulse wave velocity in senile participants. **Methods:** From January 2014 to December 2015, 1,500 participants (mean age, 71.87±5.31 years) from strength certification center and capital area in South Korea were enrolled in the study. The inclusion criteria were healthy Koreans aged >60 years who agreed on participating in the test and examination. **Results:** Our study demonstrated that higher tertile of VO2 max, relative grip strength, standing balance time, and 10-meter walking speed were significantly associated with high brachial-ankle pulse wave velocity (baPWV), in comparison to lowest tertile of such variables. **Conclusions:** This study suggests that physical fitness assessments may be useful for predicting subclinical atherosclerosis, expressed by baPWV in senile subjects.

Table 1. Baseline Characteristics of the Study Participants

Characteristics	Male (n=587)	Female (n=913)	P Value
Age (years)	71.64 ± 4.76	71.87 ± 5.31	.390
Body weight (kg)	65.36 ± 8.63	57.25 ± 5.09	<.001
Height (cm)	165.73 ± 5.78	152.24 ± 5.18	<.001
BMI (kg/m ²)	23.75 ± 2.52	24.65 ± 3.13	<.001
Lean Body mass(kg)	26.90 ± 3.34	19.29 ± 2.28	<.001
Systolic Blood pressure (mm/Hg)	130.23 ± 15.45	131.79 ± 17.03	.073
CVD family history	44 (7.6%)	45 (5.2%)	.069
Smoking ^a	45 (7.7%)	5 (0.6%)	<.001
Active lifestyle ^b	288 (49.5%)	425 (49.2%)	.929
Hypertension ^c	245 (42.1%)	408 (47.3%)	.052
History of MI	11 (3.1%)	14 (4.0%)	.536
History of stroke	26 (7.3%)	16 (4.6%)	.125
Dyslipidemia	103 (17.5%)	251 (27.5%)	<.001

Abbreviations: BMI, Body Mass Index; CVD, Cardio Vascular Disease; MI, Myocardial Infarction

^aSmoked at least one cigarette a day, seven cigarettes a week, and 100 cigarettes in a lifetime.

^b>150 min of moderate-intensity physical activity in a week.

^cSystolic blood pressure of >140 mm Hg or Diastolic blood pressure of >90 mm Hg.

Table 2. Relationship Between Brachial-Ankle Pulsewave Velocity and Physical Fitness

Physical fitness	Number of patients	Crude		M1		M2		M3		
		B	P	B	P	B	P	B	P	
VO ₂ max (ml/kg/min)	347	-8.91	<.001	-4.44	.028	-4.26	.010	-4.56	.004	
VO ₂ max (ml/kg/min)	≥27.42	191	-130.22	<.001	-76.65	.021	-82.90	.007	-94.95	.002
	23.87-27.41	180	-112.88	<.001	-55.28	.065	-61.08	.024	-71.50	.010
	≤23.86	176	Ref	Ref	Ref	Ref	Ref	Ref	Ref	
Absolute grip strength (kg)	≥29.31 ^a	471	-49.55	.015	-57.83	.082	-53.26	.482	-52.41	.426
	12.21-29.30	465	-37.09	.070	-18.60	.363	-19.99	.296	-12.56	.239
	≤12.20	434	Ref	Ref	Ref	Ref	Ref	Ref	Ref	
Relative grip strength (%)	≥16.71	473	-37.89	.004	-12.990	.322	-21.09	.039	-22.42	.026
	13.24-16.70	473	-38.45	.061	-18.23	.363	-16.79	.034	-15.05	.008
	≤13.23	474	Ref	Ref	Ref	Ref	Ref	Ref	Ref	
Standing balance (seconds)	≥24.88	433	-147.53	<.001	-82.17	.004	-58.19	.005	-57.27	.003
	7.90-24.87	483	-48.59	.019	-4.64	.815	1.83	.917	3.80	.829
	≤7.89	483	Ref	Ref	Ref	Ref	Ref	Ref	Ref	
10-m walking speed (m/sec)	≥1.50	484	-136.71	<.001	-70.07	.001	-60.79	.001	-60.17	.002
	1.49-1.29	465	-87.38	<.001	-20.118	.312	-19.99	.228	-18.17	.205
	≤1.29	464	Ref	Ref	Ref	Ref	Ref	Ref	Ref	

Model 1 : adjusted for age and sex

Model 2 : sex, age, systolic blood pressure, lean mass, and BMI were adjusted.

Model 3 : sex, age, BMI, lean mass, and systolic blood pressure and additionally adjusted the family history of cardiovascular disease, smoking, and sedentary life