

## Age-related Changes in Abdominal Fat Distribution in Japanese Adults in the General Population

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### Abstract

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**Objective** Early studies have indicated that body fat shifts from peripheral stores to central stores with aging. The objective of this study was to investigate age-related changes in abdominal fat distribution of Japanese men and women of the general population over a wide range of body mass indices (BMI).

**Methods** A total of 2,220 non-diabetic, apparently healthy Japanese adults (1,240 men and 980 women; age range 40-69 years) were included in the study sample. All subjects underwent a CT scan at the level of the umbilicus, and the areas of visceral adipose tissue (AT) and subcutaneous AT were quantified.

**Results** When the subjects were stratified by BMI into 18.5-23.0 kg/m<sup>2</sup>, 23.0-27.5 kg/m<sup>2</sup>, and 27.5 kg/m<sup>2</sup> or higher, visceral AT was positively correlated with age in all of the BMI strata in both genders ( $p < 0.01$ ). In contrast, subcutaneous AT was negatively correlated with age in men with BMIs in excess of 23.0 kg/m<sup>2</sup> ( $p < 0.01$ ) and not at all in women. The mean levels of subcutaneous AT were over 2-fold greater than visceral AT in women aged 60-69 years in any BMI stratum.

**Conclusion** In Japanese men and women, visceral AT was increased with age in all BMI strata in both genders, whereas subcutaneous AT was decreased with age in men with BMIs in excess of 23.0 kg/m<sup>2</sup> and not at all in women. Even with these age-related changes in abdominal fat distribution, women retained the subcutaneous-dominant type of fat distribution up to 70 years.

**Key words:** visceral adipose tissue, aging, fat distribution

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### Introduction

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Data on regional fat distribution is important to understand the relationship of obesity to metabolic complications. It has been recognized that upper body or visceral fat distribution, which was originally described by Vague as “android obesity,” more often correlates with increased metabolic disorders in comparison to lower body or gluteo-femoral fat distribution, “gynoid obesity” (1-3). To date, many clinical studies using measurements of abdominal fat distribution (computed tomography or magnetic resonance imaging) have demonstrated stronger associations of visceral adipose tissue (AT) than subcutaneous AT with various metabolic abnormalities (3-8) and their clustering (9). The detrimental

effects of visceral AT, as opposed to subcutaneous AT, may be attributed to the position to portal circulation (10) and the secretory function of various bioactive molecules (11, 12).

Aging has been linked to a preferential increase in visceral AT, which may partly explain the metabolic derangements in the elderly (13). Several cross-sectional studies in Western populations have reported that elderly people accumulate more visceral AT than younger people (14-17), even if their body mass indices (BMIs) are comparable (14, 15). Regarding Japanese populations, Kotani et al have demonstrated that the proportion of visceral AT relative to total body fat volume increases as a function of age in both genders, whereas that of subcutaneous AT decreases in men (18); however, the subjects that were used in their

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study were limited to patients who visited the obesity clinic of a university hospital, wherein the average BMI was 34.0 kg/m<sup>2</sup> for men and 33.7 kg/m<sup>2</sup> for women. Whether this finding in obese individuals can be generalized to the general Japanese population is unknown.

The intent of this study was to investigate age-related changes in the abdominal fat distribution of Japanese men and women, including those with BMIs in the normal range. A large sample size permitted an analysis of abdominal fat distribution within different BMI strata.

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## Methods

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### Study subjects

Study subjects were recruited from employees or retired persons of public schools. Hokuriku Central Hospital has a special department where the members of the mutual aid association of public school teachers can receive medical checkups. Among the individuals who underwent checkups between April 2006 and December 2009, 2,401 persons aged 40-69 years voluntarily underwent CT scanning to evaluate abdominal fat distribution. Of these, 20 subjects with past histories of ischemic heart disease or cerebrovascular disease, 22 who were receiving treatment for diabetes, 75 who had a fasting plasma glucose  $\geq$  126 mg/dL, 29 who were being treated with anti-cancer drugs, 6 who were on drug for chronic inflammatory disease or endocrinological disease, 8 who were receiving hormone replacement therapy, and 21 who had a BMI <18.5 kg/m<sup>2</sup> (underweight) were excluded. Finally, a total of 2,220 non-diabetic, apparently healthy Japanese adults (1,240 men and 980 women) formed the study sample. Women reporting no menses for at least 6 months were considered to be menopausal. Individuals who had received hysterectomies were considered postmenopausal if they were over the age of 51, which was the average menopausal age for this sample. Signed informed consent was obtained from all subjects, and the hospital review board approved the study protocol.

### Measurement of abdominal adipose tissue by CT

AT measurements were conducted using previously published methods (19). Briefly, an axial CT scan at the level of the umbilicus was performed on each participant using an electron beam CT scanner (Aquilion Toshiba Medical Systems, Tokyo, Japan). Planimetric measurements at the level of the umbilicus have been well-correlated with volumetric quantifications of visceral AT ( $r=0.81$ ,  $p<0.001$ ) (20). The images generated were analyzed using commercial software designed for the quantification of visceral AT (Fat Scan version 3.0, N2 System, Osaka, Japan). Correlation coefficients between two observers analyzing the same visceral AT image ( $n=30$ ) were  $r=0.98$  ( $p<0.001$ ).

### Anthropometry

All evaluations were performed in the morning at the

health check department of the Hokuriku Central Hospital. Anthropometric measurements of individuals wearing light clothing designed for checkups and no shoes were conducted by well trained nurses. Weight was measured to the nearest 0.1 kg and the weight subtracting 0.4 kg for the clothing was recorded. Height was measured with subject barefoot or wearing thin socks. BMI was calculated by dividing weight (kg) by height squared (m<sup>2</sup>). WC was measured to the nearest 0.5 cm with the tape measure placed horizontally at the level of the umbilicus while the participant exhaled quietly.

### Data analysis and statistical methods

All statistical analyses were conducted using SPSS software, version 11.0 for Windows (SPSS Inc., Japan), including the means, frequencies, correlations, and multiple regression analyses. One-way analysis of the variance (ANOVA) was used to compare the mean values for continuous variables among age groups. For multiple comparisons between two groups, an unpaired Student's t-test was performed with a Bonferroni correction. For categorical values, a  $\chi^2$  test was used. The relationships of visceral AT and subcutaneous AT to age were visualized by scatter-plots and were analyzed using Pearson's correlation coefficients within each BMI stratum. For stratifying by BMI, we used the cut-off points proposed by the WHO consultation for public health action for Asian populations: 18.5-23.0 kg/m<sup>2</sup>, increasing but acceptable risk; 23.0-27.5 kg/m<sup>2</sup>, increased risk; and 27.5 kg/m<sup>2</sup> or higher, high risk (21). Tests for linear trends across 10-year age groups within each BMI stratum were performed by assigning the median value within each group and by treating the groups as a continuous variable. P value of <0.05 was considered to be statistically significant for all of the analyses.

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## Results

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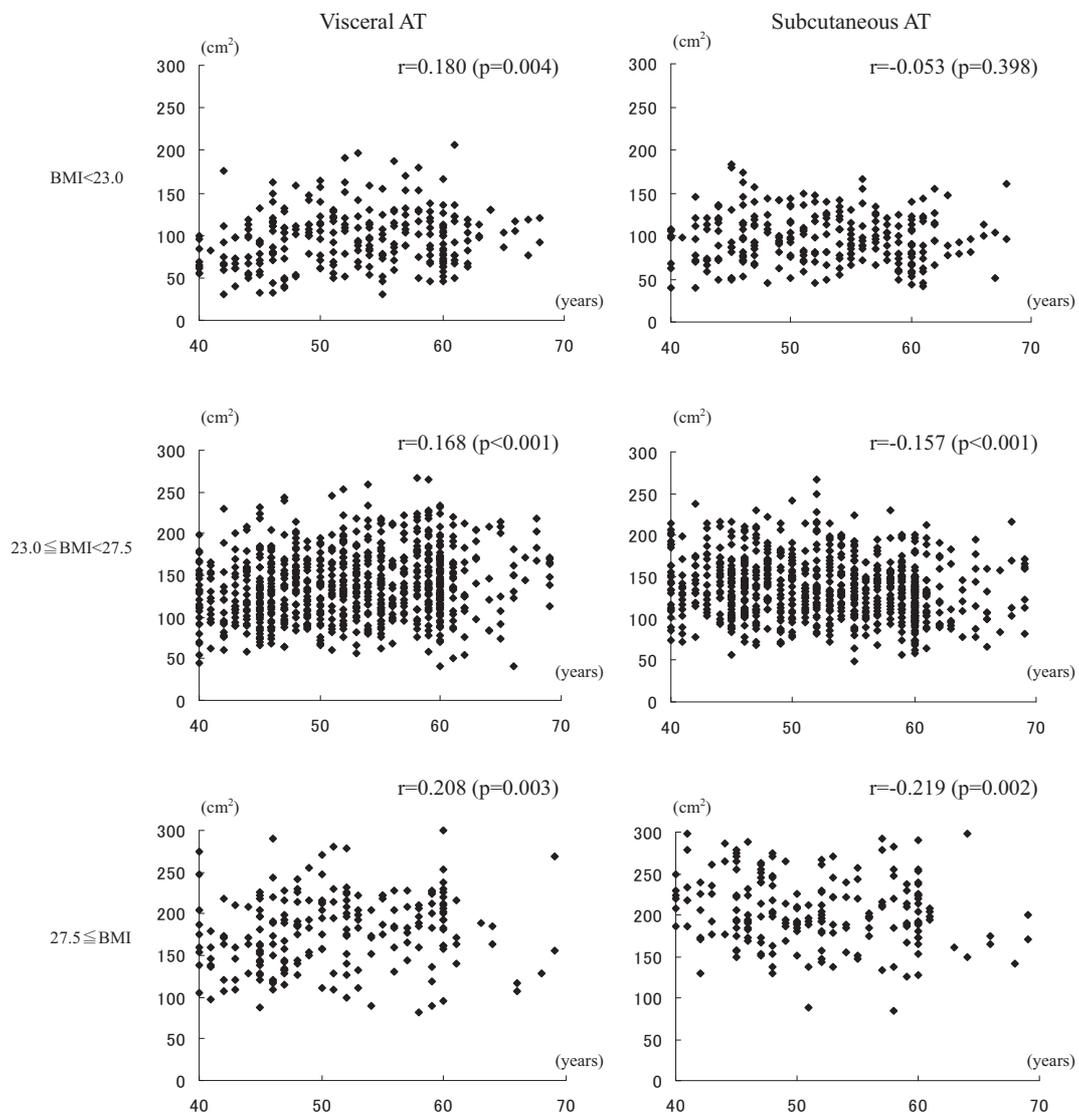
Anthropometric characteristics of the subjects are presented in Table 1 by 10-year age groups. On average, the higher age groups were significantly shorter in height and lighter in weight for both genders. The highest age group had significantly smaller mean BMIs than the youngest age group in men, although this trend was not observed for women. In women, the youngest age group was characterized by a smaller waist circumference in comparison to the older age groups. The proportions of subjects with BMI >27.5 kg/m<sup>2</sup> appeared to be lower in elderly men but were not statistically different.

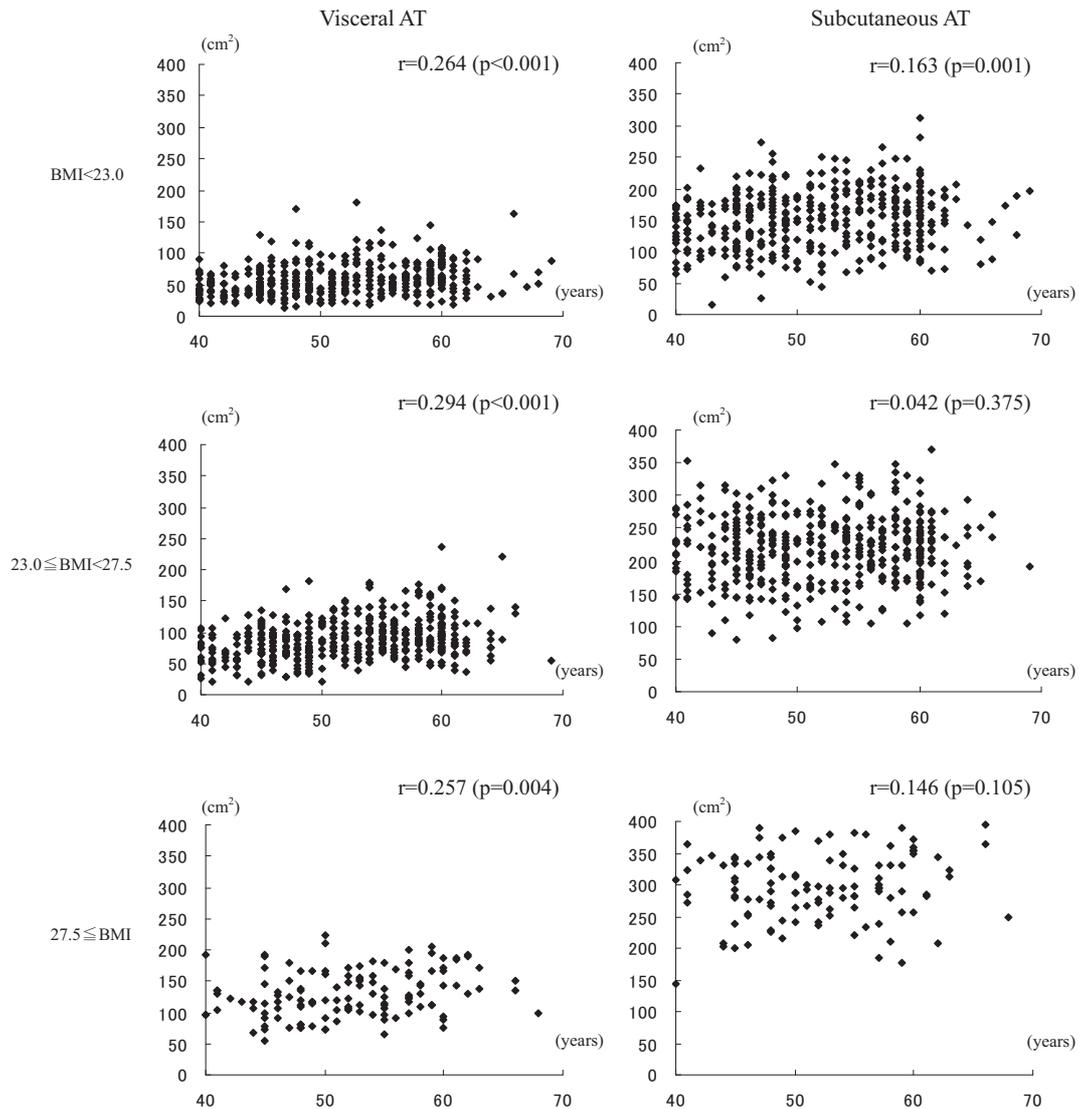
The relationships of visceral AT and subcutaneous AT with age are shown by the scatter-plots in each BMI stratum depicted in Fig. 1. Visceral AT was significantly and positively correlated with age in all of the BMI strata in both men and women ( $p<0.01$ ). In contrast, subcutaneous AT was negatively correlated with age in men with BMIs in excess of 23.0 kg/m<sup>2</sup> ( $p<0.01$ ), whereas there was no significant correlation in women except for the BMI stratum less than

**Table 1.** Anthropometric Characteristics of the Subjects by 10-year Age Groups

	Men (n=1240)			Women (n=980)		
	40-49 yrs (n=468)	50-59 yrs (n=522)	60-69 yrs (n=250)	40-49 yrs (n=398)	50-59 yrs (n=419)	60-69 yrs (n=163)
Height (cm)	171.8 ± 5.4	169.8 ± 5.4 <sup>a</sup>	167.1 ± 6.2 <sup>ab</sup>	159.0 ± 5.2	156.4 ± 5.0 <sup>a</sup>	153.0 ± 4.7 <sup>ab</sup>
Weight (kg)	74.9 ± 9.8	72.3 ± 9.1 <sup>a</sup>	68.8 ± 9.1 <sup>ab</sup>	60.2 ± 7.9	59.1 ± 8.0	56.4 ± 7.8 <sup>ab</sup>
Mean BMI (kg/m <sup>2</sup> )	25.3 ± 2.8	25.0 ± 2.6	24.6 ± 2.6 <sup>a</sup>	23.8 ± 3.0	24.1 ± 3.1	23.9 ± 3.0
Waist circumference (cm)	87.4 ± 7.2	87.9 ± 6.7	86.4 ± 7.0 <sup>b</sup>	81.4 ± 7.5	84.3 ± 8.0 <sup>a</sup>	84.3 ± 8.7 <sup>a</sup>
BMI ≥23.0 kg/m <sup>2</sup>	376 (80.3)	414 (79.3)	195 (78.0)	220 (55.3)	253 (60.4)	99 (60.7)
BMI ≥27.5 kg/m <sup>2</sup>	95 (20.3)	79 (15.1)	33 (13.2)	46 (11.6)	60 (14.3)	18 (11.0)
Postmenopausal status				32 (8.0)	330 (78.7) <sup>a</sup>	163 (100) <sup>ab</sup>

Values are expressed as mean ± SD or n (%). Significantly different from 40-49 yrs group<sup>a</sup> or from 50-59 yrs group<sup>b</sup>. BMI, body mass index.

**Figure 1A.** The relationships of Visceral AT and Subcutaneous AT with age in each BMI stratum in men



**Figure 1B.** The relationships of Visceral AT and Subcutaneous AT with age in each BMI stratum in women

23.0 kg/m<sup>2</sup>, wherein there was a positive correlation between subcutaneous AT and age ( $p=0.001$ ). The similar results were also observed when the analysis was conducted only in premenopausal women (data not shown).

Table 2 depicts the mean values of visceral and subcutaneous AT in 10-year age groups for each BMI stratum in men (A) and in women (B). Consistent with the results of the aforementioned correlation analyses, there were significant relationships between age and the mean levels of visceral AT in all of the investigated BMI strata in both genders ( $p<0.05$ ). The relationships between subcutaneous AT and age were significantly negative for men with BMIs in excess of 23.0 kg/m<sup>2</sup> ( $p<0.01$ ). In women, a positive relationship between subcutaneous AT and age groups was observed in the BMI stratum less than 23.0 kg/m<sup>2</sup>.

We calculated the ratio of visceral AT to subcutaneous AT (V/S ratio) in order to see their relative proportion. As shown in Table 3, the mean V/S ratio was significantly greater in higher age groups both in men and women, although their difference did not reach a statistical signifi-

cance in women with BMI in excess of 27.5 kg/m<sup>2</sup>. Even in women aged 60-69 years, the mean V/S ratio did not exceed 0.5 in any BMI stratum.

## Discussion

In this study, we cross-sectionally examined the relationship between abdominal fat distribution and age in a general population of Japanese men and women, including those with a BMI in the normal range. A large sample size allowed for a stratified analysis by BMI, wherein young and elderly subjects with similar BMIs were compared. The study sample consisted of apparently healthy men and women and those receiving treatments for diabetes or with a past-history of cardiovascular disease (CVD) were excluded. Thus, our findings are relevant to non-diabetic Japanese adults, who would be the primary targets for type 2 diabetes and CVD prevention.

The absolute amount of visceral AT increased as a function of age in both men and women in all of the BMI strata.

**Table 2A.** Mean Values with 95% Confidence Intervals of Visceral and Subcutaneous Adipose Tissue (AT) by 10-year Age Groups in Each BMI Stratum in Men

BMI strata	Visceral AT (cm <sup>2</sup> )				Subcutaneous AT (cm <sup>2</sup> )			
	40-49yrs	50-59yrs	60-69yrs	p for trend	40-49yrs	50-59yrs	60-69yrs	p for trend
18.5 to <23.0 kg/m <sup>2</sup>	87 (81-94)	103 (97-110)	96 (96-104)	0.027	98 (92-105)	98 (93-103)	91 (83-99)	0.197
23.0 to < 27.5 kg/m <sup>2</sup>	131 (127-135)	144 (140-149)	142 (136-148)	<0.001	142 (137-146)	139 (135-142)	124 (119-129)	<0.001
≥ 27.5 kg/m <sup>2</sup>	171 (161-178)	189 (178-200)	199 (180-218)	<0.001	225 (214-236)	206 (194-219)	202 (188-216)	0.009

AT, adipose tissue

**Table 2B.** Mean Values of Visceral and Subcutaneous Adipose Tissue (AT) with 95% Confidential Interval by 10-year Age Groups in Each BMI Stratum in Women

BMI strata	Visceral AT (cm <sup>2</sup> )				Subcutaneous AT (cm <sup>2</sup> )			
	40-49yrs	50-59yrs	60-69yrs	p for trend	40-49yrs	50-59yrs	60-69yrs	p for trend
18.5 to <23.0 kg/m <sup>2</sup>	52 (49-56)	62 (58-66)	67 (61-74)	<0.001	144 (138-150)	158 (151-165)	157 (145-169)	0.005
23.0 to < 27.5 kg/m <sup>2</sup>	76 (72-80)	96 (91-100)	97 (89-105)	<0.001	216 (209-224)	222 (214-229)	217 (207-228)	0.588
≥ 27.5 kg/m <sup>2</sup>	118 (107-128)	135 (125-144)	145 (126-166)	0.002	228 (279-317)	310 (294-328)	338 (306-370)	0.033

AT, adipose tissue

**Table 3.** V/S Ratios\* by 10-year Age Groups in Each BMI Stratum in Men and Women

BMI strata	men				women			
	40-49yrs	50-59yrs	60-69yrs	p for trend	40-49yrs	50-59yrs	60-69yrs	p for trend
18.5 to <23.0 kg/m <sup>2</sup>	0.94 (0.87-1.02)	1.09 (1.02-1.17)	1.13 (1.03-1.23)	0.020	0.39 (0.36-0.42)	0.41 (0.38-0.44)	0.45 (0.40-0.51)	0.028
23.0 to < 27.5 kg/m <sup>2</sup>	0.97 (0.93-1.01)	1.08 (1.04-1.11)	1.21 (1.14-1.27)	<0.001	0.37 (0.34-0.39)	0.45 (0.43-0.47)	0.47 (0.42-0.52)	<0.001
≥ 27.5 kg/m <sup>2</sup>	0.79 (0.74-0.84)	0.97 (0.90-1.04)	1.06 (0.89-1.13)	<0.001	0.41 (0.37-0.45)	0.44 (0.41-0.48)	0.46 (0.37-0.55)	0.135

\*V/S ratio, ratio of visceral adipose tissue (AT) to subcutaneous AT. Numbers in parentheses are 95% confidence intervals.

Although Kotani et al have already reported an age-related increase in visceral AT in 66 men and 96 women with BMI >25 kg/m<sup>2</sup> (18), our results extended their results by showing that the age-related increase was found in non-obese subjects as well as obese subjects.

On the other hand, the absolute amount of subcutaneous AT decreased with age in men with BMIs in excess of 23.0 kg/m<sup>2</sup>, which is consistent with prior studies (17, 18). Regarding women, one earlier study has reported a negative correlation between age and subcutaneous AT (22); however, their results might be attributed to the lower BMI in elderly women (mean BMI of 37.4 kg/m<sup>2</sup>) in comparison to younger women (mean BMI of 39.0 kg/m<sup>2</sup>). Within the same BMI stratum in this study, the association between age and subcutaneous AT was not negative but was even positive in lean women. The relationship of subcutaneous AT with age might be different between men and women.

The relative proportion of visceral to subcutaneous AT

was still markedly different between genders over 60 years of age in any stratum of BMI as shown in the difference in V/S ratios. This finding agrees with the results of several other prior studies (14, 17, 18, 22). Enzi et al have reported that the mean ratio of subcutaneous to visceral AT measured at the upper renal pole was 0.65 in men and 1.83 in women over the age of 60 (14). Using MRI, Kuk et al observed that in 80 postmenopausal women with a mean age of 66.7 years, and their subcutaneous AT area was over 2-fold larger than their visceral AT area at L4-L5 (17). Similar results have also been reported by Zamboni et al in 17 postmenopausal women (22). Kotani et al (18) have reported that visceral AT increased at higher rates in postmenopausal women (0.39% per year) than premenopausal women (0.15% per year); however, even in their study, subcutaneous fat volume was 2-fold larger than visceral fat volume in women aged 60-69 years. It appears that the age-related increase in visceral AT is not great enough to alter the pattern of abdomi-

nal fat distribution from gynoid type (subcutaneous AT-dominant) to android type (visceral AT-dominant) up to 70 years of age.

The increase in visceral AT with age appeared to be continuous in women from 40 up to 70 years in this study (Fig. 1B). It has been considered that increases in visceral AT are accelerated after menopause (17, 18). However, the investigators of a recent longitudinal study, which measured abdominal fat distribution during peri-menopausal periods, have questioned this notion (23). In order to clarify the influence of menopause on visceral AT accumulation independent of age, an additional longitudinal study is needed.

Several limitations of this study should be considered. First, a cross-sectional design is unable to examine the temporal sequence of aging and fat distribution. Although we investigated the age-related changes in abdominal fat distribution after stratification by BMI in this study, as shown in Fig. 1, BMI itself can change with the process of aging. A prospective study may better address the influence of menopause, too. Second, the study subjects were recruited from employees or retired persons of public schools, which may have resulted in a selection bias. The role of the "healthy worker effect" should be considered when generalizing these results to other populations. Third, the reproducibility of the measurements of visceral AT by CT scanning still seems to be incomplete due to effects of respiratory and peristaltic movements of the participants. However, it has been reported that one slice of a planimetric measurement for visceral fat correlates well with the volumetric quantification of visceral AT (20, 24).

In conclusion, in a general population of Japanese men and women, including non-obese subjects in terms of BMI, visceral AT increased with age in both genders. Subcutaneous AT significantly decreased with age in men with BMIs in excess of 23.0 kg/m<sup>2</sup> but not in women. Even with these age-related changes in abdominal fat distribution, women retained the subcutaneous-dominant type of fat distribution up until 70 years of age.

**The authors state that they have no Conflict of Interest (COI).**

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#### References

- Vague J. The degree of masculine differentiation of obesities: a factor determining predisposition to diabetes, atherosclerosis, gout, and uric calculous disease. *Am J Clin Nutr* **4**: 20-34, 1956.
- Wang Y, Rimm EB, Stampfer MJ, Willett WC, Hu FB, Matsuzawa Y. Comparison of abdominal adiposity and overall obesity in predicting risk of type 2 diabetes among men. *Am J Clin Nutr* **81**: 555-563, 2005.
- Fox CS, Massaro JM, Hoffmann U, et al. Abdominal visceral and subcutaneous adipose tissue compartments: association with metabolic risk factors in the Framingham Heart Study. *Circulation* **116**: 39-48, 2007.
- Boyko EJ, Fujimoto WY, Leonetti DL, Newell-Morris L. Visceral adiposity and risk of type 2 diabetes: a prospective study among Japanese Americans. *Diabetes Care* **23**: 465-471, 2000.
- Bray GA, Jablonski KA, Fujimoto WY, et al. Relation of central adiposity and body mass index to the development of diabetes in the Diabetes Prevention Program. *Am J Clin Nutr* **87**: 1212-1218, 2008.
- Nieves DJ, Cnop M, Retzlaff B, et al. The atherogenic lipoprotein profile associated with obesity and insulin resistance is largely attributable to intra-abdominal fat. *Diabetes* **52**: 172-179, 2003.
- Hayashi T, Boyko EJ, Leonetti DL, et al. Visceral adiposity is an independent predictor of incident hypertension in Japanese Americans. *Ann Intern Med* **140**: 992-1000, 2004.
- Oka R, Miura K, Sakurai M, et al. Impacts of visceral adipose tissue and subcutaneous adipose tissue on metabolic risk factors in middle-aged Japanese. *Obesity* **18**: 153-160, 2009.
- Carr DB, Utzschneider KM, Hull RL, et al. Intra-abdominal fat is a major determinant of the National Cholesterol Education Program Adult Treatment Panel III criteria for the metabolic syndrome. *Diabetes* **53**: 2087-2094, 2004.
- Bjorntorp P. "Portal" adipose tissue as a generator of risk factors for cardiovascular disease and diabetes. *Arteriosclerosis* **10**: 493-496, 1990.
- Lau DC, Dhillon B, Yan H, Szmitko PE, Verma S. Adipokines: molecular links between obesity and atherosclerosis. *Am J Physiol Heart Circ Physiol* **288**: H2031-H2041, 2005.
- Matsuzawa Y. The role of fat topology in the risk of disease. *Int J Obes (Lond)* **32** (Suppl 7): S83-S92, 2008.
- Despres JP, Lemieux I. Abdominal obesity and metabolic syndrome. *Nature* **444**: 881-887, 2006.
- Enzi G, Gasparo M, Biondetti PR, Fiore D, Semisa M, Zurlo F. Subcutaneous and visceral fat distribution according to sex, age, and overweight, evaluated by computed tomography. *Am J Clin Nutr* **44**: 739-746, 1986.
- Machann J, Thamer C, Schnoedt B, et al. Age and gender related effects on adipose tissue compartments of subjects with increased risk for type 2 diabetes: a whole body MRI/MRS study. *Magma* **18**: 128-137, 2005.
- Borkan GA, Hulth DE, Gerzof SG, Robbins AH. Comparison of body composition in middle-aged and elderly males using computed tomography. *Am J Phys Anthropol* **66**: 289-295, 1985.
- Kuk JL, Lee S, Heymsfield SB, Ross R. Waist circumference and abdominal adipose tissue distribution: influence of age and sex. *Am J Clin Nutr* **81**: 1330-1334, 2005.
- Kotani K, Tokunaga K, Fujioka S, et al. Sexual dimorphism of age-related changes in whole-body fat distribution in the obese. *Int J Obes Relat Metab Disord* **18**: 207-202, 1994.
- Oka R, Miura K, Sakurai M, et al. Comparison of waist circumference with body mass index for predicting abdominal adipose tissue. *Diabetes Res Clin Pract* **83**: 100-105, 2009.
- Kobayashi J, Tadokoro N, Watanabe M, Shinomiya M. A novel method of measuring intra-abdominal fat volume using helical computed tomography. *Int J Obes Relat Metab Disord* **26**: 398-402, 2002.
- WHO Expert consultation. Appropriate body-mass index for Asian populations and its implications for policy and intervention strategies. *Lancet* **363**: 157-163, 2004.
- Zamboni M, Armellini F, Milani MP, et al. Body fat distribution in pre- and post-menopausal women: metabolic and anthropometric variables and their inter-relationships. *Int J Obes Relat Metab Disord* **16**: 495-504, 1992.
- Lovejoy JC, Champagne CM, de Jonge L, Xie H, Smith SR. Increased visceral fat and decreased energy expenditure during the menopausal transition. *Int J Obes (Lond)* **32**: 949-958, 2008.
- Maurovich-Horvat P, Massaro J, Fox CS, Moselewski F, O'Donnell CJ, Hoffmann U. Comparison of anthropometric, area- and

volume-based assessment of abdominal subcutaneous and visceral  
adipose tissue volumes using multi-detector computed tomogra-

phy. *Int J Obes (Lond)* **31**: 500-506, 2007.

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