

(HSD11B1) is reported. We examined the HSD11B1 mRNA level and methylation status of the promoter region of the HSD11B1 in the adipose tissue of patients with aldosterone-producing adenoma (APA). **Methods:** We evaluated 10 adipose tissue specimens from patients with primary aldosteronism due to aldosterone-producing adenoma (APA) and 7 tissue specimens from patients with non-functioning adrenal adenoma (NFA). Primary aldosteronism was diagnosed according to the guideline of the Japanese Endocrine Society. The expression levels of HSD11B1 mRNA were quantified using a real time PCR. Isolated DNA was treated with bisulfite and amplified using primers specific for the human HSD11B1 promoter region. **Results:** The glycohemoglobin level was significantly higher in patients with APA compared with those with NFA ( $p < 0.05$ ). Blood pressure was significantly elevated in patients with APA compared with those with NFA ( $p < 0.01$ ). The HSD11B1 mRNA level and the enzyme activities were significantly increased in the adipose tissues of APA compared with NFA patients ( $p < 0.05$ ). The methylation ratio was not significantly different between APA and NFA patients. **Conclusion:** These results may suggest that adipose 11 $\beta$ -HSD1 contributes to metabolic abnormalities in APA. The pathophysiological significance of epigenetic control of 11 $\beta$ -HSD1 gene in the adipose tissue should be further studied.

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### *Epigenesis of 11 $\beta$ -hydroxysteroid dehydrogenase 1 in the adipose tissue of aldosterone-producing adenoma*

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**Objective:** 11 $\beta$ -hydroxysteroid dehydrogenase 1 (11 $\beta$ -HSD1) is the key enzyme of metabolic syndrome. The transcript-specific epigenetic regulation of 11 $\beta$ -HSD1