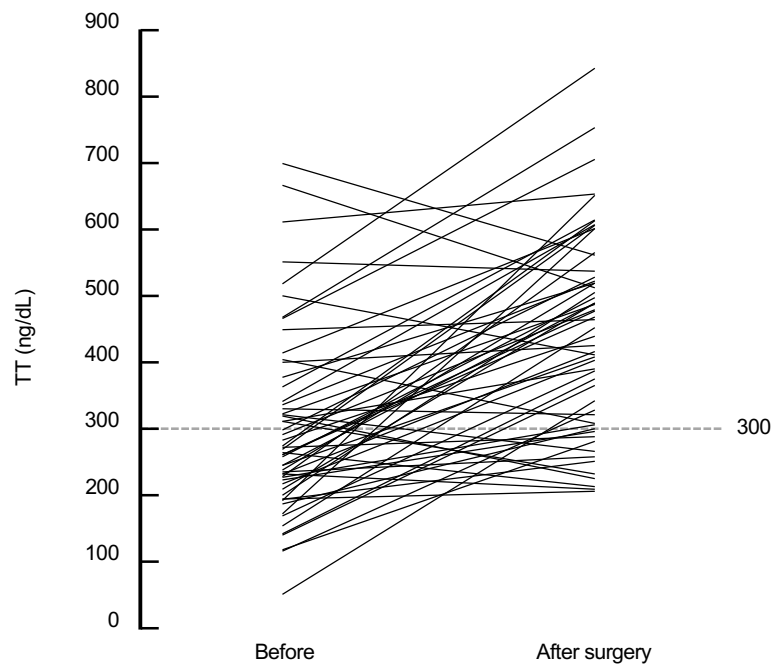


**Supplemental Figure 1**

**Relationship between TT and FT levels and age in male patients with acromegaly.**

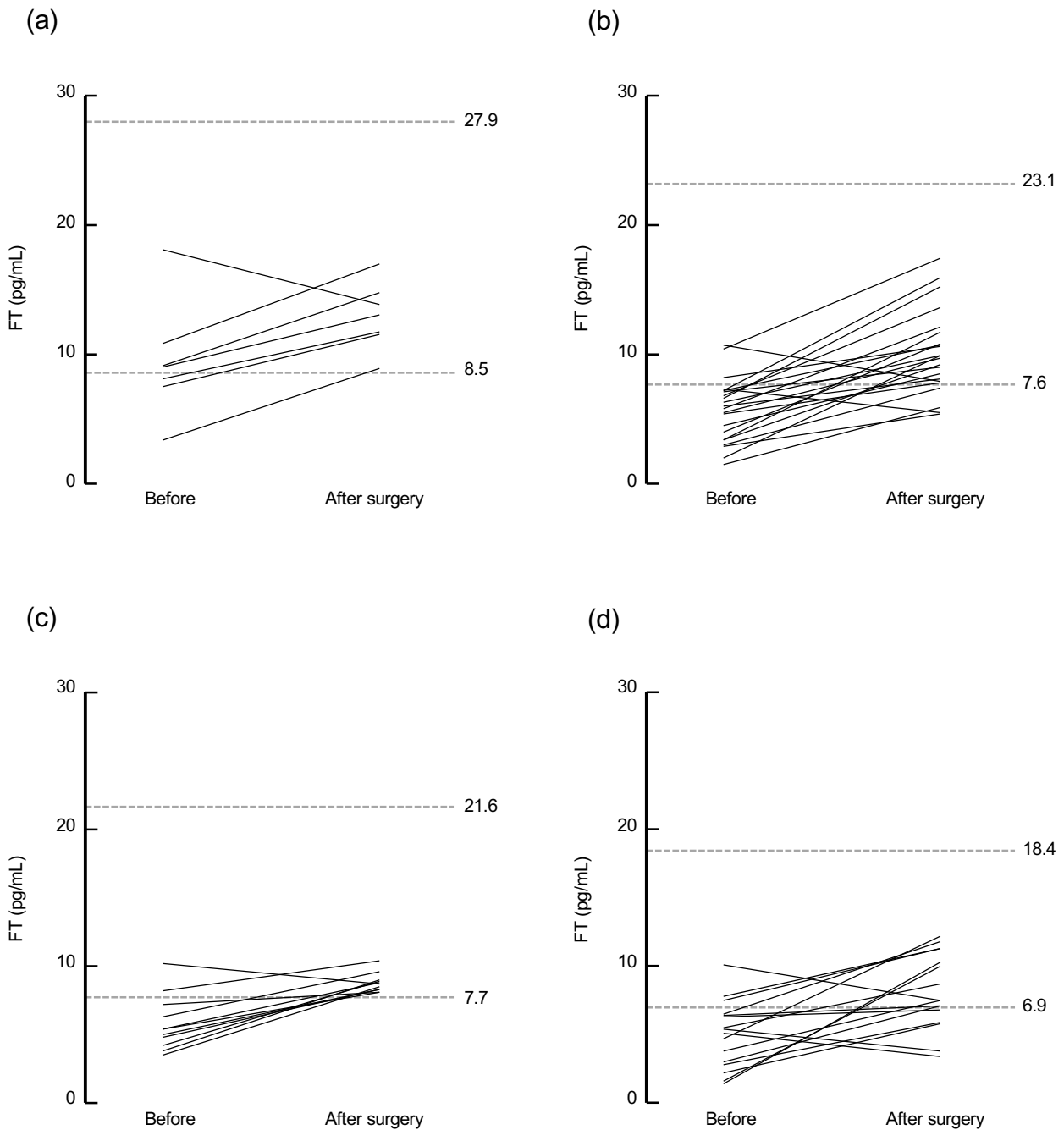
We simultaneously measured TT and FT levels in the serum of 112 male patients with acromegaly and conducted a single regression analysis by age. The ratio of TT to FT was slightly higher in males older than 40 years. open circle: 20-29 years old (n = 15), filled circle: 30-39 years old (n = 41), open square: 40-49 years old (n = 27), filled square: 50-59 years old (n = 29). solid line: 20-29 years old correlation, densely dashed line: 30-39 years old correlation, dashed line: 40-49 years old correlation, dash-dotted line: 50-59 years old correlation.



## Supplemental Figure 2

### Changes in TT levels between before and after surgery in 56 male patients with acromegaly.

We measured and compared TT levels before and 6 to 12 months after surgery. The frequency of hypogonadism patients with TT levels lower than 300 ng/dL decreased from 34 out of 56 (60.7%) before surgery to 11 out of 56 (19.6%) after surgery. The dashed line represents the cut-off value for the hypogonadism criterion of TT lower than 300 ng/dL.



**Supplemental Figure 3**

**Changes in FT levels between before and after surgery by age in 56 male patients with acromegaly.**

We measured and compared FT levels before and 6 to 12 months after surgery. (a): 20-29 years old, (b): 30-39 years old, (c): 40-49 years old, (d): 50-59 years old. The frequency of patients lower than the age-specific range decreased from 44 out of 56 (78.6%) before surgery to 9 out of 56 (16.1%) after surgery. The dashed line represents the cut-off values of the age-specific range for FT.