

Intravenous Administration of Class I Antiarrhythmic Drug Induced T Wave Alternans in an Asymptomatic Brugada Syndrome Patient

KIMIE OHKUBO, ICHIRO WATANABE, YASUO OKUMURA, TAKESHI YAMADA, RIKO MASAKI, TATSUYA KOFUNE, NAOHIRO OSHIKAWA, YUJI KASAMAKI, SATOSHI SAITO, YUKIO OZAWA, and KATSUO KANMATSUSE

From the Second Department of Medicine, Nihon University School of Medicine, Tokyo, Japan

OHKUBO, K., ET AL.: Intravenous Administration of Class I Antiarrhythmic Drug Induced T Wave Alternans in an Asymptomatic Brugada Syndrome Patient. A 53-year-old man with an abnormal ECG was referred to the Nihon University School of Medicine. The 12-lead ECG showed right bundle branch block and saddleback-type ST elevation in leads V_1 - V_3 (Brugada-type ECG). Signal-averaged ECG showed positive late potentials. Double ventricular extrastimuli ($S1$: 500 ms, $S2$: 250 ms, $S3$: 210 ms) induced VF. Amiodarone (200 mg/day) was administered for 6 months and programmed ventricular stimulation was repeated. VF was induced again by double ventricular stimuli ($S1$: 600 ms, $S2$: 240 ms, $S3$: 170 ms). Intravenous administration of class Ic antiarrhythmic drug, pilsicainide (1 mg/kg), augmented ST-T elevation in leads V_1 - V_3 , and visible ST-T alternans that was enhanced by atrial pacing was observed in leads V_2 and V_3 . Visible ST-T wave alternans disappeared in 15 minutes. However, microvolt T wave alternans was present during atrial pacing at a rate of 70/min without visible ST-T alternans. (PACE 2003; 26:1900-1903)

Brugada syndrome, ST-T alternans, pilsicainide