wave amplitude in the middle section of LA after electrocardioversion was significantly higher ($P<0.01$) than f-wave amplitudes before electrocardioversion in 14 patients aforementioned with chronic AF, which further showed that lower f-wave amplitude was connected with functional reentrant resulting from electrophysiologic changes of the regional myocardium.

The present study showed that f-wave amplitudes of the left appendage were significantly higher than those of the LA upper, middle and lower sections ($P<0.01$). We also found that wavelength and the effective refractory period of the left appendage were the longest; therefore , dispersion of the refractory period between the left appendage and the main body of atrium became larger, which easily lead to steady reentrant cycle.

Our study also showed that f-wave amplitude was not correlated to the diameter or volume of atria. Significant differences before and after electrocardioversion confirmed that f-wave amplitudes were related to the number of reentrant cycles and the size of depolarized vector in cardiac syncytium. The f-wave amplitudes of the LA middle and lower sections and A-wave amplitudes after electrocardioversion were significantly lower than those in the other sections, the relation between which and pathological changes of pressure volume in LA need further study. Enlargement of the atria due to AF and AF-induced enlargement of the atria has been reported[3-6], while f-wave amplitudes before electrocardioversion and A-wave amplitudes with sinus rhythm had not been found to be correlated to the volume of LA on echocardiagraphy after electrocardioversion[7]. That A-peak value during the systolic period of atrium on echocardiagraphy was not correlated to the atrial volume is consistent with our finding that f-wave potential value was not correlated to atrial volume.

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风湿性心脏病慢性心房颤动f波振幅的电生理研究

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[**摘要**] **目的**：对风湿性心脏病（风心病）慢性心房颤动（房颤）的房波电振幅特点进行研究，以探讨其在房颤产生和持续中的意义。**方法**：选择44例风心病慢性房颤患者在术前作16导左、右房同步心外膜标测图并进行分析，同时与10例室上速（对照组）心内电生理检查结果进行比较。**结果**：风心病慢性房颤患者A波，左房后壁中、下部f波振幅明显低于对照组A波，左房后壁上、中、下部位f波振幅明显低于右房（$P<0.05$）。14例房颤电复律后心房各部位的A波幅明显大于术前f波振幅（$P<0.01$），左心耳f波振幅显著大于左房后壁上、中、下部，左房后壁上部f波振幅显著大于左房后壁中部。风心病慢性房颤患者f波振幅与心房内径和容积无相关。**结论**：左房后壁中、下部f波振幅最低，在左房心耳、左房上和左房中、下部之间存在明显电位差，提示左房中、下部是最易产生各向异性传导的部位，推测为AF起源，在明显电位差的部位易形成折返环。

[**关键词**] 风湿性心脏病；心房颤动；f波振幅；电生理学

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