家族性心房細動（Abstract＃12286）

心房細動を有する第一度近親者がいることで、この疾患の発症リスクは上昇する

Having a first-degree relative with atrial fibrillation associated with increased risk for this disorder

Framingham Heart Studyの参加者4,000人余りの心房細動（AF）遺伝性に関する調査の結果、第一度近親者におけるAF発症は確立されたAFリスクファクターおよびAF関連遺伝子亜型で補正後のAFリスクであることが示された、と2010年AHA学会で発表されJAMA 11月24日号に掲載される。当初の参加者およびその子供は30歳以上であり、スタディ開始時にAFを有さず、親または兄弟の少なくとも一人がスタディに参加した。この解析の対象者4,421人（平均年齢54歳；女性54%）中、440人がAFを発症した。家族性AFは1,185人（26.8%）に発現し、早期家族性AF（発症年齢が65歳以下）は351人（7.9%）に発現した。ベースラインの調査時にAFの家族が存在する2,393人のうち、AFを有するのが父親であったのが1,163人、母親が1,068人、兄弟が404人であった。AF発症頻度はAF家族歴を有する者において家族歴のない者より高かった（それぞれ絶対イベント率が5.8%と3.1%であり、約40%リスク上昇）。

Full Text

An examination of the heritability of atrial fibrillation (AF) among more than 4,000 participants in the Framingham Heart Study finds the occurrence of AF in first-degree relatives was associated with AF risk after adjustment for established AF risk factors and AF-related genetic variants, according to a study presented at the 2010 AHA Scientific Sessions and appears in the November 24 issue of JAMA.

"A heritable component underlying atrial fibrillation has been well demonstrated, and it is now evident that genetic variants are associated with AF risk," the investigators write. However, the contribution of familial AF (defined in this study as the occurrence of AF in a first-degree relative prior to an examination commencing an 8-year follow-up period) to predicting new-onset AF remains unknown.

Steven A. Lubitz, M.D., M.P.H., of the Cardiovascular Research Center, Massachusetts General Hospital, Charlestown, Mass., and colleagues examined the association between AF occurrence in a first-degree relative and AF risk and hypothesized that considering familial AF would improve prediction of new-onset AF. Participants were from the Framingham Heart Study, a prospective community-based cohort study started in 1948. Original and offspring participants were at least 30 years of age, free of AF at the beginning of the study, and had at least 1 parent or sibling enrolled in the study. The 4,421 participants in this analysis (average age, 54 years; 54 percent women) were followed up through December 2007.

During the period 1968-2007, 440 participants developed AF. Familial AF occurred among 1,185 participants (26.8 percent) and premature familial AF (onset 65 years of age or younger) occurred among 351 participants (7.9 percent). Of the 2,393 baseline examinations at which familial AF was present, sources included fathers (n = 1,163), mothers (n = 1,068), and siblings (n = 404). Among participants with familial AF, the number of affected relatives ranged from 1 to 5.

The researchers found that AF occurred more frequently (approximately 40 percent increased risk) among participants with familial AF than without familial AF (unadjusted absolute event rates of 5.8 percent and 3.1 percent, respectively). The association was not weakened by adjustment for AF risk factors or reported AF-related genetic variants. Atrial fibrillation risk was associated with increasing number of affected first-degree relatives.

Assessment of premature familial AF was associated with a very slight increase in predictive accuracy compared with traditional risk factors.

"Future efforts should attempt to discern the factors that mediate the association between familial AF and AF risk, further explore the relationships between premature familial AF and risk prediction, and determine whether incorporating genetic variants into an AF prediction model enhances its performance," the authors conclude.

Cardiology特集
AHA2010（第83回米国心臓病協会）

トピックス一覧

[News01]
職務ストレスが心疾患リスクを上昇させる

[News02]
アルコール摂取量はバイパス術後の心臓に関する問題と関連がある

[News03]
キサントーマにより心血管疾患が予測される

[News04]
10代での塩分摂取量を少なくすることにより成人期の心臓の健康状態が改善する可能性がある

[News05]
軽度心不全においてアルドステロン拮抗薬は多大な有益性を示した

[News06]
魚油は心房細動再発を軽減しなかった

[News07]
新たな心ポンプが目標を達成した

[News08]
心臓再同期療法は軽度心不全患者において有用である

[News09]
Nesiritideは安全だが有益性は乏しいことが示された

[News10]
バイオマーカーにより心不全および死亡リスクが予測できる

[News11]
新薬はHDLを有意に上昇させLDLをほぼ半分に低下させる

[News12]
CRPスクリーニングは従来の心臓リスク評価を改善しない

[News13]
糖尿病患者に対する薬物療法と迅速な血行再建術の併用は有益である

[News14]
腎除神経療法による高血圧治療

[News15]
家族性心房細動

[News16]
重篤な下肢虚血に関するトライアルで遺伝子治療は不成功に終わった