

Evolution of Diagnostic Criteria for Infective Endocarditis: A Brief History

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Evolution of Diagnostic Criteria for IE

Pre 1980: “fever, anemia, murmur” – get a blood culture.

Obviously, very non-specific. The focus was on subacute viridans IE rather than acute; few IDUs, no hemodialysis, no PVE

1981: von Reyn Criteria “An analysis based on strict case definitions”. Only 123 cases, only 19 definite; no statistical validation; echocardiography not utilized. “Strict definitions are **USEFUL** in managing suspect cases, and **ESSENTIAL** in comparing clinical studies”

von Reyn CF et al, *Ann Int Med* 94:505-518

Evolution of Diagnostic Criteria for IE

1944: Jones Criteria for Diagnosis of Rheumatic Fever

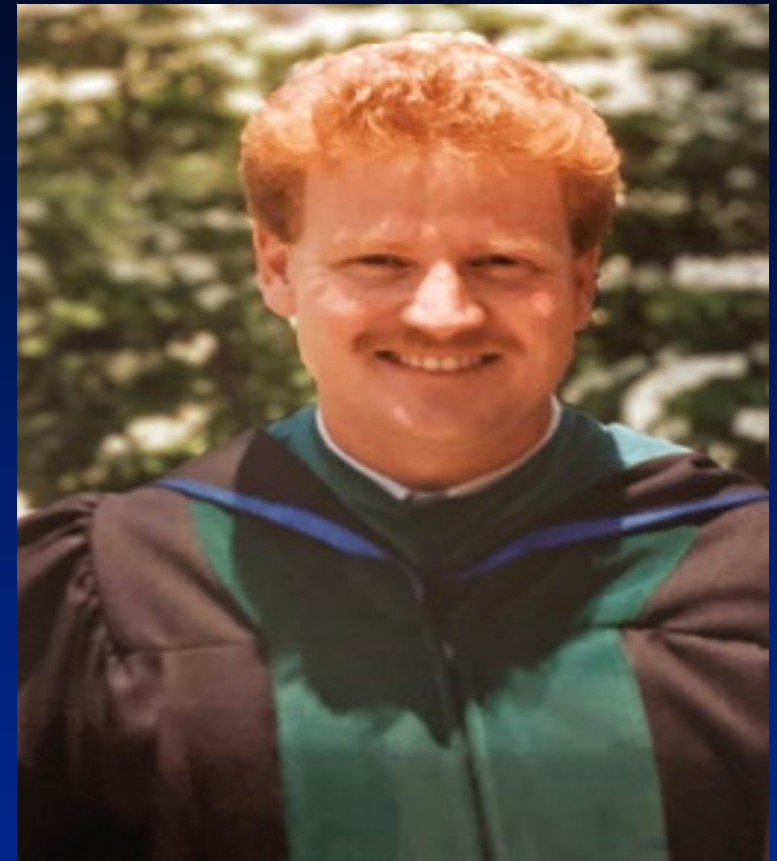
- introduced concept of MAJOR and MINOR criteria
- revised 1955, 1967, 1984, 1992

1992: Jones Criteria revised by AHA Committee on Rheumatic Fever, Endocarditis and Kawasaki Disease (this Committee later became the AHA Committee on Prevention of Infective Endocarditis)

Two dedicated Duke medical students



Andrea S Lukes



David K Bright

Evolution of Diagnostic Criteria for IE

1994: Duke Criteria: 405 cases; significantly improved sensitivity; fewer rejected cases; statistically validated. Widely utilized, with multiple independent validation studies confirming high specificity and NPV. Durack DT et al, *Am J Med* 96:200-9

2000: Modified Duke Criteria: 800+ cases; “Possible IE” revised to 1 Major plus 1 Minor, or 3 Minor; *Staph aureus* always Major; Q Fever serology added as Major. Widely utilized in clinical studies. Li JS et al, *Clin Inf Dis* 30:633-8

2015: ESC Criteria: Based on Duke Criteria; adds modern imaging PET/CT etc. Habib G et al, *Eur Ht J* 2015; 36:3075-3128

Evolution of Diagnostic Criteria for IE

Pre 1980: “fever, anemia, murmur”

1981: von Reyn Criteria

1994: Duke Criteria

2000: Modified Duke Criteria

2015: ESC Criteria

2023: ISCVID Criteria ?? In which publication??