

会長企画シンポジウム

⌚ 2025年7月11日(金) 16:45 ~ 18:15 血 第1会場 (文化会館棟 1F 大ホール)

会長企画シンポジウム3 (II-PSY3)

児童生徒の心電図検診の国際的な状況とデジタル化のインパクト

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[II-PSY3-2] ECG Screening for Pediatric Athletes and Schoolchildren: The European Perspective

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キーワード：Sudden cardiac death、ECG screening、pediatric athletes

Sudden cardiac death (SCD) in pediatric athletes, though rare, has prompted debate across Europe about the role of ECG screening in early detection of cardiac conditions. Approaches vary widely due to differences in healthcare systems, interpretation of evidence, and concerns about cost-effectiveness and false positives.

Italy mandates ECG screening for all competitive athletes, a strategy linked to reduced SCD incidence. In contrast, countries like the UK, Netherlands, France, and the Nordic nations favor more selective approaches. In the Netherlands, ECGs are mandatory only for elite athletes in high-risk sports, and recommended—but not required—for others. The UK has no national ECG screening policy; evaluations are reserved for symptomatic individuals or those with abnormal exams or family history. France has recently shifted away from mandatory PPE for minors, favoring individualized assessment. In Spain, national guidelines include ECG in PPE, but screening rates remain below 20%.

ECG interpretation in pediatric athletes is complex due to age-specific and exercise-induced changes. A new ESC consensus on pediatric ECG criteria is expected soon, aiming to improve accuracy and reduce false positives. The ESC currently recommends ECG screening for athletes aged 12 and older, leaving implementation to national bodies. Routine ECG screening in schoolchildren remains controversial and is not recommended in Europe due to low SCD risk and uncertain benefit.

While a unified European policy is lacking, there is growing agreement on risk-based, sport-specific screening strategies, emphasizing expert ECG interpretation to balance early detection with harm reduction.