

Balancing Intuition and Evidence: Clinical Gestalt in Modern Medicine

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Abstract

Clinical gestalt, a clinician's intuitive judgment, integrates objective data and subjective impressions for diagnosis. It is rapid, adaptable, and effective but prone to bias and less accurate for inexperienced clinicians. Studies show its utility in diagnosing conditions like pulmonary embolism, and sepsis though it requires validation with evidence-based tools.

Keywords: *clinical gestalt, medicine, medical decision*

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Sezgi ve Kanıtın Dengelenmesi: Modern Tıpta Klinik Gestalt

Özet

Klinik gestalt, hekimin eğitim, deneyim ve içgüdüye dayalı karar verme sürecidir. Hızlı, esnek ve etkili olsa da önyargılara açık olup deneyimsiz hekimlerde daha az doğru olabilir. Pulmoner emboli ve sepsis gibi durumlarda yararlı olduğu gösterilmiş ancak kanıta dayalı yöntemlerle desteklenmesi gerekmektedir.

Anahtar Kelimeler: *klinik gestalt, tıp, tıbbi karar verme*

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Dear Editor,

Clinical gestalt refers to a clinician's overall judgment in assessing a patient's condition, which is based on their education, experience, and intuition. This approach integrates both objective data (e.g., laboratory results, physical examination findings) and subjective impressions to form a holistic understanding of the patient. In medical literature, it is often described as "clinical intuition" or "clinical sense". Clinical gestalt offers several advantages, including being rapid, adaptable, effective in complex situations, and patient centered. However, its limitations include susceptibility to personal biases, reduced accuracy among inexperienced clinicians, and the need for validation through evidence-based methods (1). Clinical gestalt is commonly applied in conditions with diagnostic uncertainty or when diagnostic tools have limitations. Here some literature about clinical gestalt in medical decision making.

Pulmonary Embolism (PE): Gestalt plays a key role alongside risk assessment tools (e.g., Wells score, PERC rule) in confirming or ruling out PE. In a meta-analysis, van Maanen et al. evaluated the diagnostic accuracy of clinical gestalt in patients with suspected PE. The meta-analysis included 20,770 patients from 16 studies. The prevalence of PE was found to be 28.8% in patients with positive gestalt and 9.1% in patients with negative gestalt. Gestalt provided 74% sensitivity and 61% specificity in diagnosing PE, and a positive gestalt increased the risk of PE by approximately 3-fold (RR: 3.02). Although some differences were observed between studies, the results were consistent across subgroups such as age, gender, comorbidities, and healthcare settings. They suggested according to these findings that gestalt can be used as a reliable diagnostic tool in patients with suspected PE (2).

Sepsis and Shock: Facilitates rapid assessment of hemodynamic instability and disease severity in septic patients. A study published in 2024 aimed to compare physicians' clinical gestalt with existing screening tools in detecting sepsis in adults presenting with critical illness in the emergency department. The observational

study, conducted between 2020 and 2022, examined 2,484 patient-physician encounters, and 275 patients (11%) were diagnosed with sepsis. Physicians' gestalt assessment was measured with a visual analog scale (VAS) at 15 and 60 minutes. VAS in the first 15 minutes was found to be superior to other screening tools (LASSO 0.84, qSOFA 0.67, SIRS 0.67, SOFA 0.67, MEWS 0.66) in detecting sepsis with an AUC of 0.90. The results at 60 minutes showed no significant change. The study reveals that physician gestalt is more effective than other methods in early diagnosis of sepsis (3).

Acute Coronary Syndrome (ACS): Complements electrocardiogram findings and troponin levels in evaluating symptoms suggestive of ACS. In the study by Kline and Stubblefield, physicians' pretest probability estimates using the clinical gestalt method were compared with a proven computer-based method in patients with suspected ACS and PE. The study included 840 patients and followed up for 90 days. Physicians' pretest probability estimates were significantly higher than the computer method (4% and 6%) for both ACS (17%) and PE (12%). The physician estimate AUC for ACS was 0.64 and the computer method was 0.78. The physician estimate AUC for PE was 0.81 and the computer method was 0.84. They reported that, although physicians systematically overestimated the pretest probability, it was as accurate as the computer method in diagnosing PE but less accurate in diagnosing ACS (4).

In the study by Oliver et al., the diagnostic accuracy of emergency physicians' clinical gestalt in the diagnosis of ACS in patients presenting to the emergency department with chest pain was evaluated. A prospective multicenter diagnostic accuracy study included 1,391 patients with suspected ACS, and 240 were diagnosed with ACS. The overall diagnostic accuracy of the gestalt was found to be moderate with a C-statistic of 0.75 (95% CI: 0.72-0.79). In patients in whom the clinical gestalt was evaluated as "definitely not" (n=60, 4.3%), the sensitivity was 98% and the negative predictive value (NPV) was 95%. After excluding patients without ECG ischemia or troponin eleva-

tion (n=4.1%), the sensitivity and NPV were 100% and 100%, respectively. However, when an additional group (n=418, 30.8%) assessed as “probably not” ACS was excluded, sensitivity dropped to 86.2% and NPV to 99.2%. When gestalt was used for “definitely” ACS, specificity was 98.5% and positive predictive value was 71.2%. They suggested that clinical gestalt alone is not a reliable method for excluding or confirming ACS and helps emergency physicians understand the limitations of their clinical judgment (5).

In summary, clinical gestalt is an indispensable tool that complements evidence-based diagnostic methods, particularly in urgent or ambiguous clinical scenarios. However, its use should be balanced with objective assessment tools to minimize bias and improve accuracy.

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