The arithmetic of gestalt

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It has been said that we are the sum of all we have met.[1] As a learner in the emergency department, I have a lot of meeting to do. Take Sandy, a 35-year-old single mother.

Her triage note reads that she came to the hospital after losing her breath bathing her 3-year-old daughter.

If you had read it.

If you had asked her, she would have told you that she's been sweating through her clothing during the day, causing her colleagues in the university administrative office to stare awkwardly. She says no to your list of Pulmonary Embolism Rule-Out Criteria (PERC) criteria queries, uses a copper intrauterine device (IUD) as birth control (it was the cheapest option), and is healthy, as far as she knows.

If you had asked her.

If you had listened, she would have described a difficult social situation that had left her the sole provider for her young daughter. She walks the local drag once or twice a month, selling sex to whomever will buy as her current job does not pay enough to make rent every 30 days.

If you had listened to her.

If you had sat down beside her, she would have recounted the rare occasion she shot heroin into her cephalic vein to cure the numbness of anonymous sexual encounters and abandonment.

If you had sat down beside her.

If you had sent her for a computed tomographic (CT) scan of her chest, despite a negative PERC score and a negative D-dimer, the report from the radiologist would have read "right lower lobe nodular infiltrate consistent with a septic emboli."

If you had CT'd her.

If you had thought of it, acute bacterial endocarditis is also on the differential for dyspnea and fever.

If you had thought of it.

Narratives plus differentials plus clinical decision tools plus or minus diagnostic tests. The product of a clinical encounter is often not merely the sum of these distinct components. It is often the result of something more. The medical lexicon has a word for this. It is called gestalt.

The concept of gestalt is traditionally paraphrased as a whole that is greater than the sum of the parts.[1] The original author, Kurt Koffka, went one step further, saying, "The whole is other than the sum of the parts."[2] This "other," the provision for a complexity that is greater than the mere sum of each component, more accurately reflects the daily patient encounters we face in the emergency department.

Gestalt as a clinical decision tool in itself often blurs the lines between the objective and the subjective. Dr. Klein has gone so far as to include gestalt as a criterion in determining the likelihood of the presence of pulmonary embolism.[3] Other academics question whether gestalt is good enough when it comes to clinical reasoning skills. They cite confirmatory bias, overconfidence, and illusory correlation (linking events when there is no relationship) to be among the errors that an intuition-based approach such as gestalt is prone to.[4] A 2007 study noted that physicians "are remarkably unaware that their own cognitive limitations and biases have unintended adverse consequences for their patients."[5] The stark lines of likelihood ratios charted across three-way tables often fail to transect the lived experiences of the patients we meet. These tools, not rules, suffer from their own maladies of bias and validation error. The challenge that Dr. Bachmann

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and colleagues in their systematic review exploring medical choice and judgment so succinctly notes is that "medical decisions require judgment in uncertain conditions"[6]—uncertain conditions complicated by time restraints, overcrowding, access block, ancillary supports. The list goes on.

I find myself caught in a delicate dance between three parties: the public, the patient and his or her caregivers, and me, the physician, whose fledgling gestalt is heavily compensated by textbook knowledge and simulated scenarios. I attempt to offset my often ill-timed steps in this dance, choreographed largely by my own inexperience, with a heavy reliance on clinical decision scores, whose vast array of criteria pale only in comparison with the lists of eponyms and acronyms to which they are assigned. When that fails, I am grateful to the many preceptors whose own gestalt prevents me from sending patients such as Sandy home with the instructions to follow up with their family physician in 1 week if things do not get better.

For a rookie like me, gestalt is an intricate, sometimes elusive art continually honed over time. It is acquired in the curtained stretcher-sides of fluorescence-lit beds in concert with other clinical decision tools, a clinical acumen modelled patiently by my proficient preceptors and so graciously tolerated by patients I have cared for early in my career. Like Sandy, their narratives have contributed to the sum of my knowledge. I hope that the next time the arithmetic of risk factors and pattern recognition does not quite add up, I will have gestalt in my clinical toolbox to guide me.

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