Tidsskriftet Tidsskrift for Den norske legeforening

New patient care pathways: You can't please everyone

EDITORIAL

DAG JACOBSEN

E-mail: uxdaja@ous-hf.no
Dag Jacobsen MD PhD, specialist in clinical pharmacology, internal medicine and cardiology. He is director and professor at the Department of Acute Medicine at Oslo University Hospital.
The author has completed the ICMJE form and declares no conflicts of interest.

The new patient care pathways in emergency medicine can save lives – providing the patient is on the right pathway and the pathway is not so narrow that retreat is impossible.

'The father of medicine', Hippocrates, who practised around 450 BC, was concerned with diagnostics, treatment and prognosis. Given the limited equipment and remedies available to his practice at the Asclepeion on Kos, prognosis was most important, particularly for families' male providers. In present day medicine, however, the focus has shifted to sophisticated and effective diagnostics and treatment – exemplified by the patient care pathways of modern emergency medicine. These save lives and prevent complications through early identification, triage and treatment of cases such as cardiac arrest, STEMI (ST elevation myocardial infarction), stroke, sepsis and – not least – trauma. The principle is succinctly expressed in aphorisms such as 'time is brain cells' and 'time is heart muscle'. Many institutions therefore have teams in their acute admissions departments for 'pathway patients', and some also have teams for patients not on these pathways (1).

Treatments of all types, whether interventions, procedures or medication, have complications or side effects. Benefit must therefore always be weighed against cost. The side effect in modern care pathways is that patients can end up on the wrong pathway, which means incorrect treatment despite the best of intentions, until it is finally realised that something is not right.

«The side effect in modern care pathways is that patients can end up on the wrong pathway»

Sønstebø et al. consider this in a laudably pedagogical manner in their case report on a man in his forties suffering mental and circulatory effects after a fall (2). It contains details of substance abuse, which is common in trauma patients (3), so it is easy to understand why the patient was handled by a trauma team. A critically ill patient may have several diagnoses, with the need for rapid clarification as the common denominator.

Some conditions, such as endocarditis, pulmonary embolism and sepsis, are often called 'the great imitators'. Some would also include poisoning/intoxication and abstinence in this group. In the case in question, cocaine poisoning was the principal cause of the fatal trajectory. The complication hyperthermia, which probably triggered a consumption coagulopathy (disseminated intravascular coagulopathy, DIC) was also a contributory factor.

The Journal of the Norwegian Medical Association's 'Case report' column has also featured patients from our university hospital. In the published case, we failed to see beyond rhabdomyolysis as the potential cause of muscular pain during exercise (4). It was a time when exercise-induced rhabdomyolysis was on everyone's lips, and 'everyone' thought of this. The answer came weeks later when the patient was admitted with stroke triggered by a septic embolism from the mitral valve. Another example I know of is the patient who ends up on the 'stroke pathway' owing to cerebral deficit with the same pathogenesis as described above. Unfortunately these patients are sometimes treated with thrombolysis.

«The referring doctor's tentative diagnosis is often correct, so we are not very used to restarting the diagnostic process from scratch with new patients»

Our new patient pathways are here to stay. The question is what we can do to prevent patients being placed on the wrong pathway. Norwegian medicine differs from many Western countries in that the referring on-call physician 'filters' patients before hospitalising them. The doctor's tentative diagnosis is often correct, so we are not very used to restarting the diagnostic process from scratch with new patients – as happens in some foreign emergency departments. I believe the most 'dangerous' diagnosis one can be hospitalised with in Norway is suspected pulmonary embolism. Regardless of the hospital's current capacity, these patients are accepted without question. The admitting doctor has great respect for the diagnosis and wants to confirm or exclude it – instead of starting the diagnostic process from scratch. Such a patient may perhaps wait a while for a CT angiogram. If the patient has sepsis, valuable hours are lost.

Inspection of Norwegian acute admissions in 2007 showed that the least experienced doctors were often alone in acute admissions (5). For this reason, a new main specialty in emergency medicine (AMM) was established. These specialists were supposed to deal with undiagnosed patients and support the less experienced doctors in acute admissions. Acute medicine outside hospitals and care pathway medicine were not to be covered by this new speciality – if the pathways worked.

The experience of Sønstabø et al., *and* our own experience, have shown that we must be humble and open to the possibility that patients may end up on the wrong pathway, and that the pathway 'administrators' should be ready to confer with specialists in emergency medicine if something appears to be amiss. This will bring about a further improvement in patient safety, also in our acute admissions.

LITERATURE

1. Engebretsen S, Bogstrand ST, Jacobsen D et al. NEWS2 versus a single-parameter system to identify critically ill medical patients in the emergency department. Resuscitation Plus 2020; 3: 100020. [CrossRef]

2. Sønstabø K, Gjerde S, Dicko A et al. En mann i 40-årene med mental og sirkulatorisk påvirkning etter falltraume Tidsskr Nor Legeforen 2021; 141. doi: 10.4045/tidsskr.20.0546. [CrossRef]

3. Tollisen KH, Bjerva M, Hadley CL et al. Substance abuse-related admissions in a mixed Norwegian intensive care population. Acta Anaesthesiol Scand 2020; 64: 329–37. [PubMed][CrossRef]

4. Bjerva M, Berild D, Jacobsen D. En veltrent mann med mekanisk aortaklaff og leggsmerter. Tidsskr Nor Legeforen 2017; 137: 113–6. [PubMed][CrossRef]

5. "Mens vi venter…. " – forsvarlig pasientbehandling i akuttmottakene? Rapport 2/2008. Oslo: Helsetilsynet, 2008. https://www.helsetilsynet.no/historisk-arkiv/rapport-fra-helsetilsynet/2008/forsvarlig-pasientbehandling-oppsummering-landsomfattende-2007-akuttmottak-somatisk-spesialisthelsetjeneste/ Accessed 7.1.2021.

Publisert: 1 February 2021. Tidsskr Nor Legeforen. DOI: 10.4045/tidsskr.21.0014