

WHAT'S NEW IN INTENSIVE CARE



Is this critically ill patient elderly or too old?

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Life expectancy is increasing in industrialized countries. It is forecast that in the European Union 24.4 million people will be older than 85 years in 2040, more than doubling from the 10.4 million seen in 2010 [1]. In parallel, the rates admission of very elderly patients to intensive care units (ICU) have increased, currently corresponding to 15% of all ICU admissions [2]. Given limitations in ICU bed availability, this poses challenges to the ICU triage decision-making process. Indeed, old age as such is for some physicians a reason for refusing ICU admission [3]. The ethical dilemma lies on the will to not admit old patients because they are believed to have a poor prognosis or perceived poor quality of life, thereby possibly refusing to admit those old patients for whom ICU care can make a difference. This conundrum is illustrated by the wide variation in admission rates of the very elderly seen between hospitals [4].

There are few guidelines available in this area and objective estimation of the benefits of ICU admission, especially in the very elderly, in part because of numerous methodological and ethical challenges. Estimation of the benefits of ICU admission should be considered not only in terms of survival but also taking into account the restoration of an acceptable quality of life [5]. Factors associated with prognosis in very old ICU patients have been studied but none of them had enough power to be recommended as strong indicators for the triage of these patients [4, 6–8]. Additionally, cognitive bias associated with personal feelings about the potential lack of ICU benefit for a very old patient may lead to a number of preconceived ideas and misguiding the ICU triage for the very elderly such as: “Very old patients with cognitive disorders should not be admitted to ICU”, “If there

is no rapid improvement in a very old patient admitted into ICU, withdrawing life support therapies should be applied” or “The very old patients surviving an ICU stay will frequently have a decrease of their quality of life”.

In a recent randomised controlled clustered multicentre trial, Guidet and colleagues showed that a systematic ICU admission policy of a relatively selected population of elderly patients did not decrease 6-month mortality compared to care on the ward [9]. This study underlines the necessity to look for criteria helping the intensive care physician to identify those elderly patients who will benefit from ICU care.

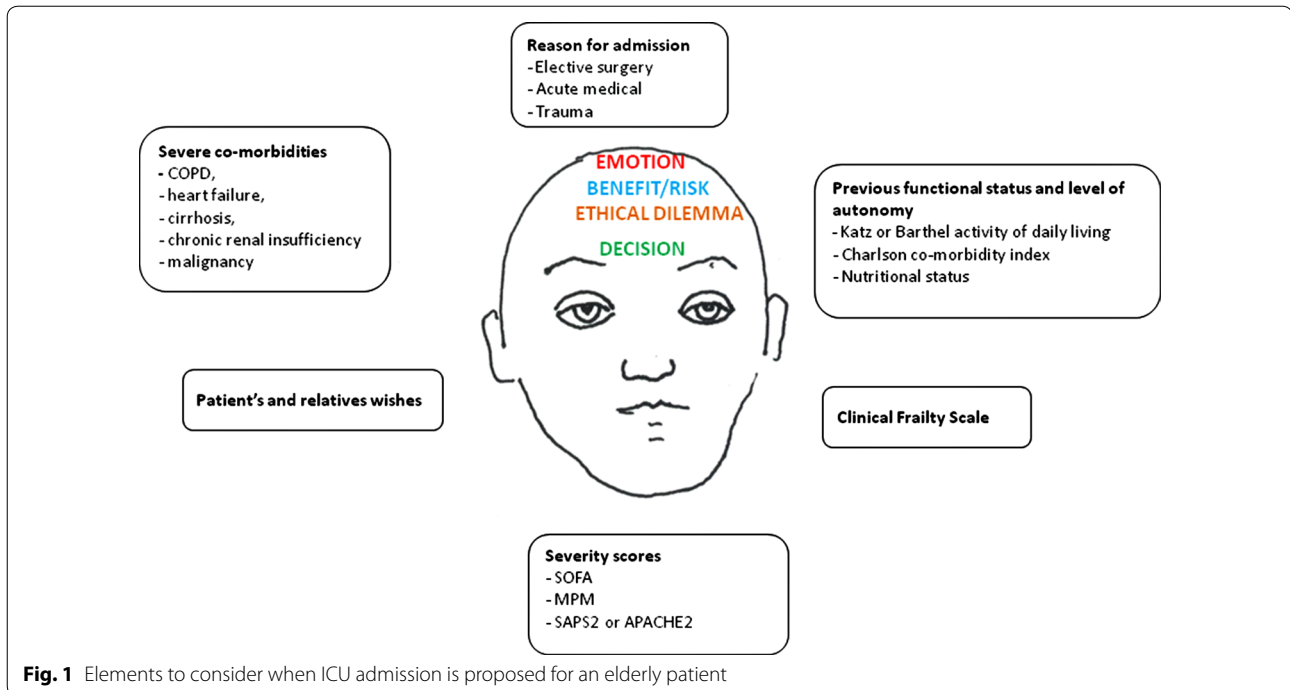
In this issue of the journal, Flaatten and colleagues report the results of a large European observational study capturing current ICU care of patients older than 80 years. The main focus of the study was to estimate the incidence and impact of frailty among elderly ICU patients [10]. The concept of clinical frailty describes a state of reduced physical, physiologic and cognitive reserve which is associated in ICU patients with increased risk of mortality and adverse outcomes [11, 12]. In the current study clinical frailty was categorised using a commonly used score that includes 9 stages, from 1 (very fit) to 9 (terminally ill). This frailty score is easy to use and is well validated outside the ICU [13]. Although frailty is more common in older individuals, frailty and aging are not synonymous. Interestingly Flaatten and colleagues showed that frailty (stage ≥ 5) was present in 43% of the very old patients admitted to ICU and independently associated with lower 30-day survival [10].

The authors described two types of elderly ICU patients: (1) preselected very old patients admitted to ICU after elective surgery with a very short ICU stay and low mortality, and (2) acute patients with a longer stay and a high mortality. This is not surprising, as elective surgery is planned and performed on selected patients, and importantly almost 50% of the elective patients had

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low frailty scores. The acute admissions are a different story altogether, as almost 50% of the acute patients had high frailty scores, more severe organ failure and high mortality. Unfortunately in this study, data on long-term mortality as well as on long-term quality of life restoration are missing. Nevertheless, the simple tool grading frailty could be added to multiple items, including the will of the patient that should be considered when the intensivist is faced with the proposal of ICU admission for a very old patient (Fig. 1).

Remarkably, 23% of patients stayed less than 24 h in the ICU. This particular group of patients was commonly admitted because of non-elective reasons (75%), had similar frailty pattern compared with those who stayed more than 24 h and presented higher crude ICU mortality, but similar 30-day survival. Among patients who died in these first 24 h of ICU admission, nearly half had treatment limitation in place. A remarkable characteristic was a very high SOFA score, with a median of 12 points, representing on average a minimum of three organ dysfunctions. We urgently need to better understand who these patients are including their pathway to the ICU: are they being admitted too late or does some proportion of them have what can be considered as a terminal disease and they should receive care outside the ICU? In some cases palliative care team consultation may be the solution, thereby avoiding stressful and potentially unbeneficial transfers to the ICU. It is also possible that some of the elderly frail patients with multi-organ failure are

admitted after hours, when there are less senior physicians on site that could contribute to the decision on whether to admit or not.

The current study supports the practice of admitting the very old patient to the ICU after elective surgery. Similarly, those very elderly patients without malignancy, with good nutritional status and good autonomy are probably good candidates for ICU admission. For the remaining acute population representing the majority of the patients, the presence and severity of frailty should be included when deciding on whether to admit or to refuse admission. Clearly there is an imminent need for more research in this area, e.g. a prognostic score to be used on ICU admission seems like an appealing option.

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Compliance with ethical standards

Conflicts of interest

On behalf of all authors, the corresponding author states that there is no conflict of interest.

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