3. Several retrospective studies have compared established transfusion regimens to more restrictive approaches with hemoglobin (hb) triggers of 7-8 g/dl (vs. 9-10), but no change of mortality was found. The only prospective randomized study in critically ill patients could not identify any beneficial effect of a liberal transfusion strategy on outcome (2). One large chart analysis in patients with myocardial infarction showed that trans-fusions decrease mortality in patients with hbc<10g/dl (3).

4. The term ‘Critical Hematocrit’ has been derived from the critical oxygen delivery defining a threshold below which aerobic metabolism becomes directly supply-dependent. However, due to a variety of co-factors, especially cardiovascular disease, this value is different between patients, and cannot easily be assessed by established clinical monitoring tools. Thus, the decision to transfuse should not exclusively be based on a single ‘critical’ value, but rather on evaluation of several factors, such as hemodynamics and clinical judgement.

References:
2. Hebert et al.: NEJM 1999; 340, 409-17
3. Wu et al.: NEJM 2001; 345, 1230-6

IL15

METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) IN NURSING HOMES: A DANGER FOR INTENSIVE CARE UNITS?

W. Lingnau, N. Treml, F. Allerberger*
Dept. of Anaesthesiology and Critical Care Medicine and *Institute of Hygiene, Leopold-Franz-University, Anichstr. 35, A-6020 Innsbruck, Austria

Background and Goal of Study. Shifting population demographics with a growing segment of late middle-aged and elderly persons result in a trend toward older, sicker, and more complex patients in hospital wards and intensive care units (ICUs). Our goal is to evaluate the prevalence of nasal colonisation with Staphylococcus aureus (SA) and corresponding risk factors in community nursing homes in Innsbruck, Austria

Patients and Methods. The Ethics Committee approved this study at the University of Innsbruck. We took nasal swabs from nursing home residents and processed them in the microbiological laboratory within two hours. Cultures were performed on selective agar plates. We performed antimicrobial susceptibility testing according to the guidelines of National Committee for Clinical Laboratory Standards (NCCLS).

Results and Discussion. We screened 623 residents (mean age 85.0±8.9 yr., male 17.2%) in five community nursing homes for nasal carriage of S. aureus. Among these residents 311 (49.9%) were colonised with S. aureus, 39 of them were MRSA (12.5%). We found significantly more male residents colonised with MRSA (male 20.0% vs. female 10.5%; p<0.05). Other risk factors were the presence of cardiovascular diseases (14.9% vs. 0.0%), diabetes (26.0% vs. 7.7%), bedore (50.0% vs. 11.7%), a history of bacterial infection during the past two months (pulmonary 42.9%, urinary 27.8%, none 10.1%), or recent treatment at the university medical centre (18.6% vs. 10.5%). There was a linear correlation between the category of bacterial infection and MRSA prevalence (A: 0.0%; B: 5.9%; C: 8.3%; D: 15.6%; E: 20.4%). Resistance of colonising MRSA to other antimicrobials: ciprofloxacin 100%, imipenem 91.7%, mupirocin 29.2%, cotrimoxazol 15.6%, fusidic acid and vancomycin 0%.

Conclusion. The prevalence of MRSA is higher in nursing homes than in average. It is pivotal to stop the spread of resistance by screening for and eradication of colonising MRSA in concert with hygienic measures.

IL16

PUMP FAILURE AND PHARMACOLOGICAL SUPPORT

H. Metzler, W. Toller
Department of Anesthesiology, University Hospital of Graz, Auenbruggerplatz 29, A-8036 Graz, Austria

While positive inotropic drugs, including catecholamines and phosphodiesterase (PDE) inhibitors clearly represent the mainstay of pharmacological therapy of acute myocardial pump failure, the choice of agent or combination of substances is less clear and primarily depends on the underlying pathophysiological alteration causing pump failure. Stimulation of β-adrenergic receptors with dobutamine will particularly increase myocardial contractility without significantly altering systemic and pulmonary vascular resistances and may currently be the agent of choice during states of post-infarction myocardial pump failure. During persistent states of low cardiac output despite therapy with dobutamine, PDE-inhibitors or epinephrine may transiently be added. Stimulation of α-adrenergic receptors with norepinephrine will increase systemic vascular...