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Why We Need the Lede, in Both Journalism & Medicine



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In journalism, the “lede” is the first part of a news story. A good lede contains the key points and gives the general idea of the article. Ledes are also crucial in medicine.

When healthcare professionals communicate with each other, we use ledes all the time. Let’s say a doctor is working in a clinic and is sending a university student to the emergency department. The doctor is concerned that the student could have meningitis. The patient—let’s call him John Doe—is confused and has a fever. His blood pressure is low, but his heart rate is high. After calling 911, the doctor calls the ED to communicate that the patient is coming in an ambulance. The charge nurse answers the phone. Consider the following two scenarios and which has a better lede?

“I just sent an unstable, 21-year-old male to your department because I’m concerned he could have meningitis. His blood pressure is 86/52 and his heart rate is 120. His temperature is 102.2, he is confused, and his neck is stiff. His name is John Doe and he will be there in 5 minutes. The ambulance just left with him.”

OR

“A patient came into my office this afternoon. His name is John Doe, and he is 21. He started feeling unwell yesterday after he got home from basketball practice. His roommates brought him to my office today because John became confused. When I checked John’s blood pressure, it was low, and his heart rate was high. His neck was stiff and his temperature was up, so I think it could be meningitis. He just left here in an ambulance and he should arrive to you soon.”

In the first example, the charge nurse knows from the first sentence that John’s condition is serious. Already, she is thinking about the next steps, who she needs to notify, and the supplies they will need. The word “unstable” gives a hint about John’s level of sickness. The specific numbers describing his blood pressure, heart rate, and temperature give an idea of the severity of his illness.

In the second example, it is not clear until the end of the paragraph that the doctor is thinking that John could have meningitis. A couple of unnecessary sentences may not seem like that much extra time, but in medicine, time can be crucial, especially in emergencies. ■



Deceased Donor Kidneys With AKI & Recipient Graft Survival



Results from a study suggest that the transplant community should consider using deceased donor acute kidney injury (AKI) kidneys more frequently to overcome the shortage of these life-saving organs.



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According to current estimates, 95,000 patients with end-stage renal disease (ESRD) in the United States who have cleared medical evaluations to receive a deceased donor kidney remain on the waiting list.

Approximately 9,000 of these patients are removed from the waiting list each year due to death or deteriorating health. While the need for donor kidneys is rising by 8% per year, their availability has not grown at the same rate to match the need. Researchers have proposed using kidneys from deceased donors with acute kidney injury (AKI) to potentially help reduce the shortage of these organs.

In some clinical settings, AKI and chronic kidney disease (CKD) are seen as interconnected, but AKI in the setting of deceased donor transplant may not be comparable. A variety of factors can lead to serum creatinine (SCr) fluctuations that meet criteria for AKI in deceased donors who typically do not have CKD, severe cardiovascular disease, or sepsis. “AKI may be a manageable issue in the context of organ donation,” explains Chirag R. Parikh, MD, PhD.

A New Study Analysis

Recent clinical trials support the cautious use of select kidneys from deceased donors with AKI, but current allocation practices of such kidneys by organ procurement organizations have not been well characterized. “Currently, the national discard or rejection rate for all potential donor kidneys is approximately 18%, but this rate increases to 30% for AKI kidneys,” says Dr. Parikh. For a study published in *JAMA*, Dr. Parikh and colleagues mimicked a clinical trial using registry data to match deceased donors with and without AKI. They evaluated the association of deceased donor AKI with recipient graft survival and then characterized current recovery and discard practices of AKI kidneys across the country.

Kidneys from 13,444 deceased donors were transplanted into 25,323 patients with ESRD in

the US from 2010 to 2013. Of these, 12,810 received kidneys with AKI and 12,513 were given kidneys without signs of AKI. Each AKI kidney was paired at the beginning of the study with a non-AKI kidney using a statistical method that mathematically linked several donor characteristics, including age, sex, ethnicity, and medical conditions other than AKI. Transplant recipients were followed for 4 to 6 years after surgery.

Highlighting Important Data

The study revealed that deceased donor AKI status had no association with death-censored or all-cause graft failure (Table). “Our key finding was that that deceased-donor AKI had no association with either short-term or long-term survival of the organ,” says Dr. Parikh. AKI kidney transplantations had comparable rates of recipient graft survival, even among the highest stages of injury. Results were consistent after examining by AKI stage and adjusting for recipient and transplant characteristics. More recipients of AKI kidneys developed delayed graft function (29% vs 22%), but few recipients developed primary nonfunction, regardless of deceased donor AKI status.

To determine how many potentially viable kidneys with AKI were lost during the study, the authors assessed how many deceased donor kidneys with AKI were recovered and then either transplanted or discarded. Nearly 17,500 of the more than 20,500 available AKI kidneys were procured over the 3-year study, but only slightly more than 12,700 were transplanted. “This means almost 8,000 organs were either rejected after procurement or never obtained at all simply because the donors had AKI,” Dr. Parikh says.

Expanding the Pool

The study findings strongly support the idea that kidneys with AKI should be actively procured and transplanted. “Our results suggest that the transplant community should consider cautiously using deceased donor AKI kidneys to expand the donor pool,” says Dr. Parikh. “Future investigations should determine if currently discarded AKI kidneys from deceased donors without substantial comorbidities can be used more effectively. For example, it is possible there is a labeling effect of SCr on the kidney quality score that may lead to discarding AKI kidneys when they may actually be usable for patients with kidney disease.” ■

Table Graft Failure Risk by Deceased Donor AKI

Variable	Deceased Donor AKI	Event Rate per 1,000 Person-Years	Unadjusted Hazard Ratio	Adjusted Hazard Ratio*
Death-censored graft failure	No AKI	30.9	1 [Reference]	1 [Reference]
	Stage 1	32.2	1.03	1.03
	Stage 2	31.5	1.01	1.00
	Stage 3	27.9	0.94	0.90
All-cause graft failure	No AKI	60.5	1 [Reference]	1 [Reference]
	Stage 1	61.8	1.01	0.99
	Stage 2	61.5	1.01	0.96
	Stage 3	53.5	0.91	0.85

*Adjusted for cold ischemia time and the following recipient variables: age, sex, black race, diabetes as the cause of recipient end-stage renal disease, preemptive transplant, previous kidney transplant, HLA mismatch level, panel reactive antibody (percentage), and BMI.

Abbreviation: AKI, acute kidney injury.

Source: Adapted from: Liu C, et al. *JAMA Netw Open*. 2020;3(1):e1918634.

Medical Economics

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Providing Patients Record Access

This article was originally published in *Medical Economics* and is written by Keith Loria.

Many physicians aren’t aware that, with limited exceptions, HIPAA gives patients the right to get copies of all of their medical records and allows them to see all original medical records, usually at a medical provider’s office.

Shuhan He, MD, an emergency medicine physician at Massachusetts General Hospital, says one of the most common misconceptions is that patients somehow are limited in obtaining their own medical records because of HIPAA.

“Many smaller practices actually use it as a way to prevent patients from accessing their own records for fear of mishandling data in some capacity,” he says. “What I always emphasize is that the legislation itself was called the Health Insurance Portability and Accountability Act. The rule actually encourages patients to access their information and move it between practices, even if providers and healthcare entities are required to protect that information at a higher burden.”

Providing the Records

Anwar A. Jebran, MD, a third-year internal medicine resident at Weiss Memorial Hospital in Chicago suggests practices use systems that are compatible with interoperability standards such as HL7 FHIR, an interface for exchanging electronic health records, which would eliminate much of the manual workload associated with accessing records.

“For practices without that, having a system to handle these requests with posted timelines works well,” he says. “Corroborating information with the patient before adding it to their health records is also a good practice of verbally sharing the patient’s health records and then giving them the option of either receiving a copy or managing their own documents.”

Money Matters

The HIPAA Privacy Rule permits a covered entity to charge a reasonable, cost-based fee that covers certain limited labor, supply, and postage costs that may apply in providing an individual with a copy of medical records in the form and format requested or agreed to by the individual.

However, the laws for copying medical records vary from state to state in terms of fees. For instance, in Florida, searches for medical records are \$1 per search per year, \$1 per printed page, and \$2 for microfilm. But it gets more complicated when you cross state lines.

The law is very clear. People have a right to their data, Jebran says. ■

To read the unabridged version, visit www.medicaleconomics.com.

Systolic & Diastolic Hypertension in Patients on Hemodialysis

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Prior research indicates that receiving hemodialysis is predominantly systolic, whereas isolated diastolic hypertension is rare and mainly affects younger patients. For a review published in *Seminars in Dialysis*, we explored the role of volume overload, arterial stiffness, and erythropoietin use in the pathogenesis of systolic versus diastolic hypertension among patients on hemodialysis.

In the Dry-weight Reduction in Hypertensive Hemodialysis Patients, or DRIP, trial, 150 hypertensive patients on hemodialysis were randomized in a 2:1 ratio to ultrafiltration or control groups.

The intervention in the ultrafiltration group was a gradual reduction in post-dialysis weight, whereas the control group received only usual care without any dry-weight adjustment. A reduction in post-dialysis weight by 0.9 kg at week 4 of follow-up resulted in a placebo-subtracted lowering of 6.9/3.1 mm Hg in 44-hour ambulatory blood pressure (BP). This BP-lowering effect persisted at 8 weeks follow-up. Since volume overload is an important mediator of systolic and diastolic BP elevation, the management of hypertension in hemodialysis should be initially relied upon strategies targeting the achievement of an adequate dry-weight.

The association of arterial stiffness with ambulatory BP and its response to therapy were explored in a secondary analysis of the Hypertension in Hemodialysis Patients treated with Atenolol or Lisinopril, or HDPAL, trial. In adjusted analyses, each 1 m/sec higher aortic pulse wave velocity (PWV) was associated with 1.34 mm Hg greater 44-hour systolic BP and 1.02 mm Hg greater pulse pressure (PP), whereas the association of PWV with diastolic PP was not significant. Although baseline PWV was associated with an overall improvement in 44-hour PP, it was not a predictor of treatment-induced reduction in either 44-hour systolic or diastolic BP at 3, 6, and 12 months follow-up. Thus, a combined strategy of dry-weight reduction, sodium restriction, and antihypertensive drug use was effective in improving ambulatory BP control regardless of the severity of arteriosclerosis in the trial.

Other non-volume-dependent mechanisms, such as erythropoietin use, may also be important mediators and should be taken into consideration, particularly in younger hemodialysis patients with diastolic hypertension. The exact magnitude and time course of the pressor effect induced by erythropoietin warrants further investigation in future clinical trials. ■



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