

Title: Trends in the Use of TPN Among Patients Admitted With Acute Pancreatitis

PRESENTER: Daniel Pievsky

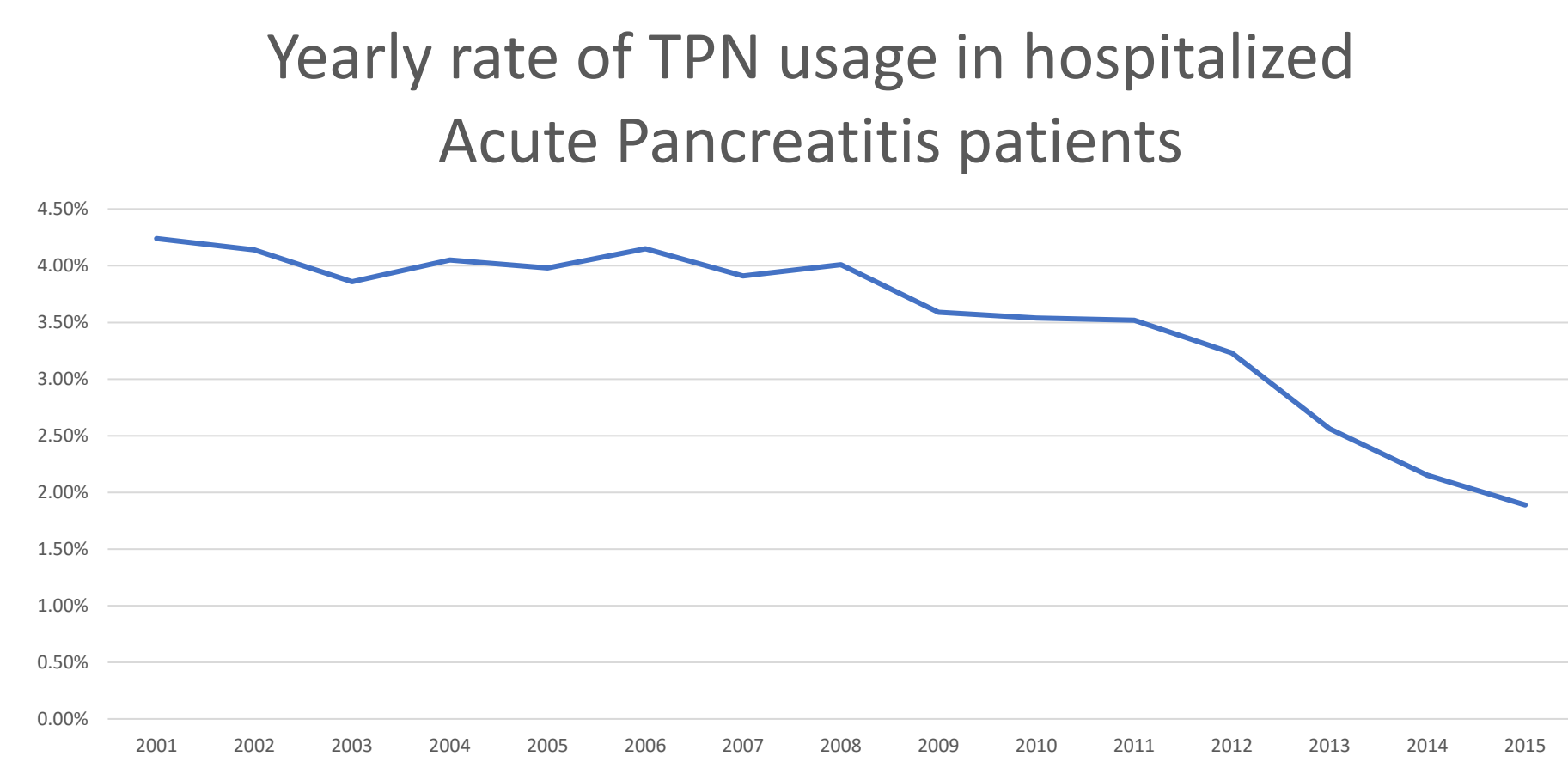
INTRO:

- Acute pancreatitis (AP) is a common condition that accounts for a high amount of patient morbidity and mortality
- Enteral nutrition (EN) is the preferred feeding modality for patients with AP
- In 2010 a Cochrane meta-analysis showing the superiority of EN in AP
- First guidelines recommending against the use of parenteral nutrition (PN) were published in 2013

METHODS

- Analyzed the National Inpatient Sample database for patients hospitalized with AP with and without PN from 2000 to 2014
- Teaching hospitals were compared with non-teaching hospitals

RESULTS



Year	Teaching	Non Teaching
2000	4.63%	4.01%
2001	4.85%	3.72%
2002	4.90%	3.28%
2003	5.23%	3.40%
2004	5.02%	3.42%
2005	5.19%	3.64%
2006	4.42%	3.56%
2007	4.34%	3.82%
2008	4.43%	3.08%
2009	4.06%	3.24%
2010	3.89%	3.28%
2011	3.46%	3.13%
2012	2.89%	2.31%
2013	2.41%	1.96%
2014	2.09%	1.63%

The use of parenteral nutrition in acute pancreatitis has been declining in both teaching and non-teaching hospitals.



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	no TPN utilized		TPN utilized		P value
Number of patients (%)	3,014,584	96.59%	106,426	3.41%	
Women, no. (%)	1,453,279	48.54%	49,456	46.47%	< 0.01
Race/ethnicity, no. (%)					< 0.01
White	1,953,450	64.80%	76,414	71.80%	
Black	526,045	17.45%	13,708	12.88%	
Hispanic	375,617	12.46%	10,377	9.75%	
Asian or Pacific Islander	55,167	1.83%	2,235	2.10%	
Native American	22,308	0.74%	564	0.53%	
Other	81,997	2.72%	3,129	2.94%	
Age					< 0.01
18-29	268,298	8.90%	8,652	8.13%	
30-39	472,084	15.66%	16,028	15.06%	
40-49	659,591	21.88%	22,924	21.54%	
50-64	852,524	28.28%	30,119	28.30%	
≥ 65	762,087	25.28%	28,714	26.98%	
Charlson Comorbidity Index, no. (%)					< 0.01
0	1,633,904	54.20%	53,969	50.71%	
1	805,497	26.72%	29,299	27.53%	
2	298,142	9.89%	11,739	11.03%	
≥ 3	277,040	9.19%	11,420	10.73%	
Median annual income in patient's zip code, US\$, no. (%)					< 0.01
1 - 38,999	853,730	28.32%	22,520	21.16%	
39,000 - 47,999	794,946	26.37%	26,500	24.90%	
48,000 - 62,900	711,442	23.60%	27,373	25.72%	
≥ 63,000	654,165	21.70%	30,034	28.22%	
Insurance type, no. (%)					< 0.01
Medicaid	1,027,672	34.09%	37,090	34.85%	
Medicare	510,369	16.93%	15,453	14.52%	
Private	1,075,905	35.69%	44,188	41.52%	
Uninsured	400,638	13.29%	9,695	9.11%	
Hospital Region					< 0.01
Northeast	603,821	20.03%	29,097	27.34%	
Midwest	506,149	16.79%	17,784	16.71%	
South	1,286,021	42.66%	45,210	42.48%	
West	618,593	20.52%	21,860	20.54%	
Hospital Bed Size					< 0.01
Small	456,106	15.13%	12,409	11.66%	
Medium	842,878	27.96%	29,182	27.42%	
Large	1,715,600	56.91%	64,835	60.92%	
Urban Location	2,566,616	85.14%	96,752	90.91%	< 0.01
Teaching Hospital	1,199,804	39.80%	47,924	45.03%	< 0.01

Overall use has declined since 2007; however, the rate of decrease was greatest from 2011 to 2014, with a mean yearly decrease of 0.45%.

While 55% of all patients who received PN were located at non-teaching hospitals, the percentage of hospital patients on PN was greater in teaching hospitals (3.84% vs. 3.12%, p < 0.0001).

The mean yearly decrease in PN use from 2000 to 2014 is similar for teaching (0.18%) and non-teaching hospitals (0.17%).

Since 2011, however, PN use for AP among teaching hospitals has been declining at a faster rate than among non-teaching hospitals (0.45% decrease vs. 0.41%).

Daniel Pievsky, DO, RD;
Savan Kabaria, MD;
Oleg Shulik, MD

