

Table 1. Characteristics, clinical outcomes, treatment modalities, feeding practices and enteral feeding intolerances

Parameters	All (N=83)	Hospital A (n=21)	Hospital B (n=35)	Hospital C (n=10)	Hospital D (n=14)	Hospital E (n=3)	P
Age, mean (SD), years	58.0 (12.7)	56.1 (13.5)	59.6 (14.3)	60.0 (8.8)	54.6 (9.7)	65.7 (8.7)	0.513
Male, no. (%)	63 (75.9)	15 (71.4)	28 (80.0)	7 (70.0)	10 (71.4)	3 (100)	0.764
Ethnicity, no. (%)							0.346
Chinese	51 (61.4)	12 (57.1)	23 (65.7)	5 (50.0)	8 (57.1)	2 (100)	
Malay	11 (13.3)	1 (4.8)	3 (8.6)	4 (40.0)	3 (21.4)	0	
Indian	10 (12.0)	4 (19.0)	5 (14.3)	0	1 (7.1)	0	
Others	11 (13.8)	4 (19.0)	4 (11.4)	1 (10.0)	2 (14.3)	0	
Weight, mean (SD), kg	74.4 (15.4)	72.4 (13.5)	72.0 (16.3)	78.8 (12.3)	77.6 (17.4)	85.1 (17.7)	0.406
BMI, mean (SD), kg/m ^{2a}	27.1 (5.0)	27.0 (4.3)	26.4 (5.9)	28.1 (2.8)	27.7 (5.1)	29.4 (6.1)	0.777
25.0–29.9	29 (36.3)	6 (33.3)	14 (40.0)	6 (60.0)	3 (21.4)	0	0.270
>30.0	22 (27.5)	4 (22.2)	8 (22.9)	3 (30.0)	5 (35.7)	2 (66.7)	0.487
Admission, no. (%)							
ED	26 (31.3)	14 (66.7)*	5 (14.3)	2 (20.0)	4 (28.6)	1 (33.3)	0.001
HD	3 (3.6)	0	0	0	3 (21.4)*	0	0.004
Ward	44 (53.0)	5 (23.8)*	22 (62.9)	8 (80.0)	7 (50.0)	2 (66.7)	0.019
Other hospitals	10 (12.0)	8 (9.5)	8 (22.9)	0	0	0	0.104
Comorbidities, no. (%)							
Diabetes	21 (25.3)	4 (19.0)	4 (22.9)	5 (50.0)	4 (28.6)	0	0.187
Hypertension	45 (54.2)	12 (57.1)	17 (48.6)	8 (80.0)	7 (50.0)	1 (33.3)	0.430
Cardiological	6 (7.2)	1 (4.8)	4 (11.4)	0	1 (7.1)	1 (33.3)	0.388
Neurological	4 (4.8)	2 (9.5)	1 (2.9)	1 (10.0)	0	0	0.600
Renal	8 (9.6)	1 (4.8)	3 (8.6)	2 (20.0)	2 (14.3)	0	0.641
Cancer	5 (6.0)	3 (14.3)	1 (2.9)	1 (10.0)	0	0	0.340
Disease severity scores, mean (SD)							
APACHE II	19.4 (9.8)	21.2 (11.6)	14.8 (7.7)*	24.6 (6.7)	25.4 (9.1)	15.3 (4.9)	0.001
SOFA	7.0 (4.5)	6.3 (5.1)	5.4 (3.3)*	8.4 (2.7)	10.5 (5.3)	8.7 (1.2)	0.003
mNUTRIC	4.1 (2.0)	4.0 (1.9)	3.4 (1.8)*	5.9 (1.8)	5.1 (1.8)	4.3 (2.3)	0.002

Table 1. Characteristics, clinical outcomes, treatment modalities, feeding practices and enteral feeding intolerances (Cont'd)

Parameters	All (N=83)	Hospital A (n=21)	Hospital B (n=35)	Hospital C (n=10)	Hospital D (n=14)	Hospital E (n=3)	P
Dialysis, no. (%)	29 (34.9)	7 (33.3)	12 (34.3)	2 (20.0)	8 (57.1)	0	0.226
Median (IQR), days	4.0 (1.5, 6.0)	1.0 (1.0, 10.0)	3.0 (2.0, 6.0)	3.0 (2.0, NA)	5.0 (1.8, 7.0)	NA	0.855
Neuromuscular blockade, no. (%)	58 (69.9)	11 (52.4)	429 (82.9)	3 (30.0)*	12 (85.7)	3 (100)	0.004
Median (IQR), days	4.0 (2.0, 8.0)	2.0 (2.0, 4.0)	6.0 (4.0, 8.0)	3.0 (1.0, NA)	3.0 (3.0, 4.0)	2.0 (1.0, NA)	0.056
Prone (%)	39 (47.0)	4 (19.0)	21 (60.0)*	4 (40.0)	9 (64.3)*	1 (33.3)	0.026
Median (IQR), days	4.0 (2.0, 6.0)	4.5 (2.5, 8.0)	6.0 (3.5, 7.0)	3.5 (2.0, 6.5)	3.0 (2.0, 3.5)	2.0 (2.0, 2.0)	0.079
Head elevated <10°, no. (%)	5 (12.8)	1 (25)	3 (14.3)	0	0	1 (100)*	0.032
Feeding practices							
Start of EN, no. (SD), hour	11.5 (10.2)	11.8 (11.8)	14.2 (10.4)	10.7 (7.2)	7.7 (9.5)	6.7 (2.1)	0.345
Early feeding, no. (%) ^b	70/73 (95.9)	19/20 (95.0)	24/26 (92.3)	10/10 (100)	14/14 (100)	3/3 (100)	0.506
MAP<65, no. (%)	3/73 (4.1)	20/20 (100)	2/26 (7.7)	10/10 (100)	1/14 (7.1)	0/3 (0)	0.628
Peroral ≥2 days, no. (%)	9/83 (10.8)	1/21 (4.8)	8/35 (22.9)	0	0	0	0.054
Parenteral nutrition, no. (%)	2/83 (2.4)	0	2/35 (5.7)	0	0	0	0.590
Feeding intolerance							
High-GRV, episodes/100 feeding days	7.7	17.4*	7.2	1.2	3.1	0.0	<0.001
Diarrhoea							
Patients, no. (%)	35 (42.2)	7 (33.3)	19 (54.3)	0	9 (64.3)*	0	0.005
Days/100 ICU days	5.8	8.5	5.4	0	30.8*	0	<0.001
Clinical outcomes							
RH, no. (%)	5 (6.0)	1 (4.8)	3 (8.6)	0	1 (7.1)	0	0.857
ICU mortality, no. (%)	15 (18.1)	2 (9.5)	10 (28.6)	0	3 (21.4)	0	0.158
Hosp mortality, no. (%)	15 (18.1)	2 (9.5)	10 (28.6)	0	3 (21.4)	0	0.158
ICU-LOS of survivors, median (IQR), days	11.0 (7.0, 21.8)	8.0 (6.0, 11.0)*	18.0 (8.0, 31.0)	8.5 (5.0, 15.0)	14.0 (11, 32.0)	19.0 (13.0, NA)	0.027
Hosp-LOS of survivors, median (IQR), days	31.0 (19.3, 44.0)	23.0 (17.0, 37.0)	31.0 (19.5, 67.0)	30.5 (15.0, 41.5)	39.0 (29.0, 48.0)	31.0 (17.0, NA)	0.119
MV of survivors, median (IQR), days	9.0 (5.0, 15.0)	7.0 (3.0, 10.0)	11.0 (5.5, 25.5)*	7.5 (3.0, 11.3)	12.0 (9.0, 15.0)*	10.0 (8.0, NA)	0.039
Tracheostomy, no. (%)	11 (13.3)	2 (9.5)	5 (14.3)	0	4 (28.2)	0	0.274

APACHE II: Acute Physiologic Assessment and Chronic Health Evaluation II; BMI: body mass index; ED: emergency department; EN: enteral nutrition; GRV: gastric residual volume; HD: high dependency ward; Hosp: hospital; ICU: intensive care unit; IQR: interquartile range; LOS: length of stay; MAP: mean arterial pressure (mmHg); mNUTRIC: modified Nutrition Risk in Critically Ill; MV: mechanical ventilation; NA: not available; RH: refeeding hypophosphataemia defined as serum phosphate <0.65 within 72 hours of feeding; SD: standard deviation; SOFA: Sequential Organ Failure Assessment

^a 3 missing data

^b Enteral nutrition started within 36 hours of admission to the intensive care unit

* P<0.05