| MO644 | :DIABETES AND DIALYSIS:PROPOSAL FOR A CONTAGION PREVENTION PROTOCOL IN COVID-19 PANDEMIA |

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BACKGROUND AND AIMS: After the official coronavirus (SARS-CoV-2) pandemic declaration by the WHO, Italy had the second-largest number of confirmed cases, after China. The Italian government introduced progressive infection-mitigation measurements, thus dramatically reducing social interactions and preventing virus spread. During the summer, infection containment measures progressively loosened until, due to an unjustified interpretation of some permissions and the excessive utilization of public transportation at school reopening, the contagion rate progressively increased until causing a severe challenge for our NHS again. Aim of the study: to assess the efficiency of our previously described protocol in 18 Campania region-located Nefrocenter Consortium DCs as further adapted to new knowledge under the new ubiquitous contagion conditions and to identify SARS-CoV-2-infection mortality rate and risk factors.

METHOD: Dialysis patients did so too during that period according to the expected shifting prevalence over time (mean $\pm$ SD: 853 $\pm$ 30 per month; range 825 to 873) $\pm$ (11.8% in April, and 14.8% in November vs. a pre-COVID-19 12.0% rate in January).

RESULTS: More patients got infected in November (10.19%) than in April (0,24%), and 22 patients of the 89 from the SARS-CoV-2 November positive subjects required hospitalization for moderate-severe symptoms (24.72%), with death unavoidably coming in 19 (86.36% of hospitalized and 21.35% of infected patients) compared to the only one recorded in April (0.12%). The pandemic's two periods showed a strong association between mortality rate and often co-existing comorbidities, primarily represented by arterial hypertension, type 2 diabetes mellitus (T2DM), and chronic kidney disease (CKD).

CONCLUSION: The previously efficient contagion containment measures adopted by our DCs were not enough in November to fight the global infection risk pending on the whole Italian social community around. The Authors discuss possible reasons and put forward further suggestions for the best handling of any future infection waves

MO644   Table 1. General features of subjects on chronic dialysis as of April 23, 2020, and co-morbidities observed according to diabetes status. *IHD/AF/HF= composite outcome: Ischemic Heart Disease/ Atrial Fibrillation/ Heart Failure. Data expressed as Mean+SD, range, or n; (%). In no case were HIV Infection, Autoimmune Disease, and Obesity present.

	SARS-CoV-2 positive patients (n. 89)	SARS-CoV-2 negative patients (n. 784)		Total n.
	N (%)	N (%)	p	
Comorbidities				
IHD/AF/HF *	12 69.16	386 49.23	<.0001	398
Stroke	7 7.87	176 22.45	<.001	183
Arterial Hypertension	76 85.39	509 64.92	<.01	585
Type 2 Diabetes Mellitus	79 88.76	253 32.40	<'0001	332
Chronic Obstructive Pulmonary Disease	31 34.83	178 22.70	<.01	209
Active Cancer in the past 5 years	2 2.25	0 -	-	2
Dementia	9 10.11	27 3.44	<.05	36
Chronic Liver Disease	19 21.35	156 19.90	n.s.	175
Respiratory Failure	14 15.73	134 17.59	n.s.	148
Number of Comorbities				
0	0 -	5 0.64	-	5
1	0 -	105 13.39	-	105
2	0 -	189 24.11	-	189
3 at least	89 100.00	485 61.86	<'0001	574

MO644   Table 2. Most common co-morbidities observed in SARS-CoV-2 positive patients compared to negative ones in the second pandemic period (1st august - 13th November). In no case were HIV Infection, Autoimmune Disease, and Obesity present. *IHD/AF/HF = composite outcome = Ischemic Heart Disease/ Atrial Fibrillation/ Heart Failure.

	OVERALL (n. 873)		T2DM yes (n. 332)	T2DM no (n. 471)	P
Sex M/F (%)	52/48		47/53	51/47	n.s.
Age years	66.5+5.3		76.5+3.6	64.6+3.2	<.05
BMI kg/m2	23.5+2.3		25.2+3.6	21.5+1.8	<.05
	18.8 - 29.4		19.5 - 29.4	18.8 - 26.5	
T2DM	332	38.03			
On Insulin	252	75.90	-	-	
On other	80	24.10			
COMORBIDITIES N, (%)					
IHD/AF/HF *	398	45.99	(51.85)	(42.31)	<.01
Stroke	183	(20.96)	(23.11)	(18.09)	n.s.
Chronic Obstructive Pulmonary Disease	209	23.94	25.52	20.90	<.05
Arterial Hypertension	585	67.01	59.72	39.54	<.01
Active Cancer in the past 5 years	2	0.23	-		-
Dementia	36	4.12	3.85	3.94	n.s.
Chronic Liver Disease	175	20.05	23.61	17.33	<.01
Respiratory Failure	148	16,95	17.61	15.42	n.s.
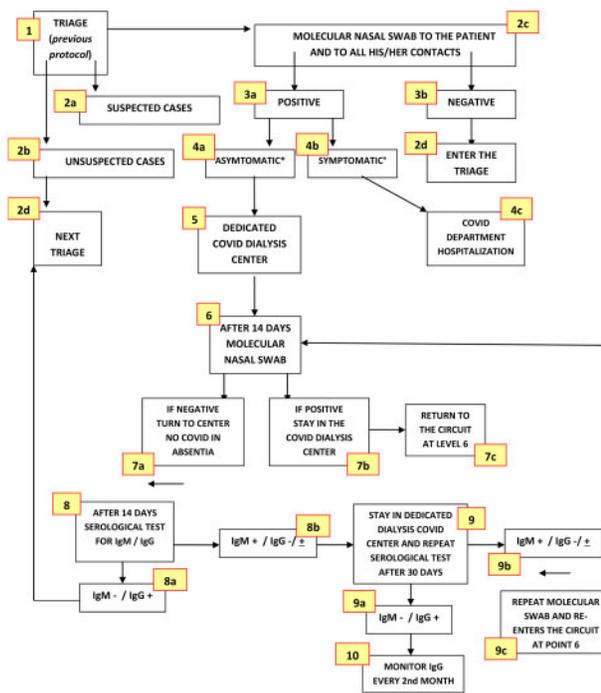
MO644   Figure 1 : Identification and management flowchart of SARS-CoV-2 positive dialysis patients. *asymptomatic, pre-symptomatic or mild symptomatic infection (fever, cough, dysgeusia, disosmia, headache, myalgia, in the absence of dyspnea and X-ray abnormalities (stage 1 and 2 according to NIH classification [64]); ° moderate, severe or critical illness according to the same classification.