

LOW PROTEIN DIETS IN CKD: MULTIPLE AND FEASIBLE. A MULTICENTER STUDY. (The TOPI da CASA study: Torino Pisa, Cagliari Solofra).



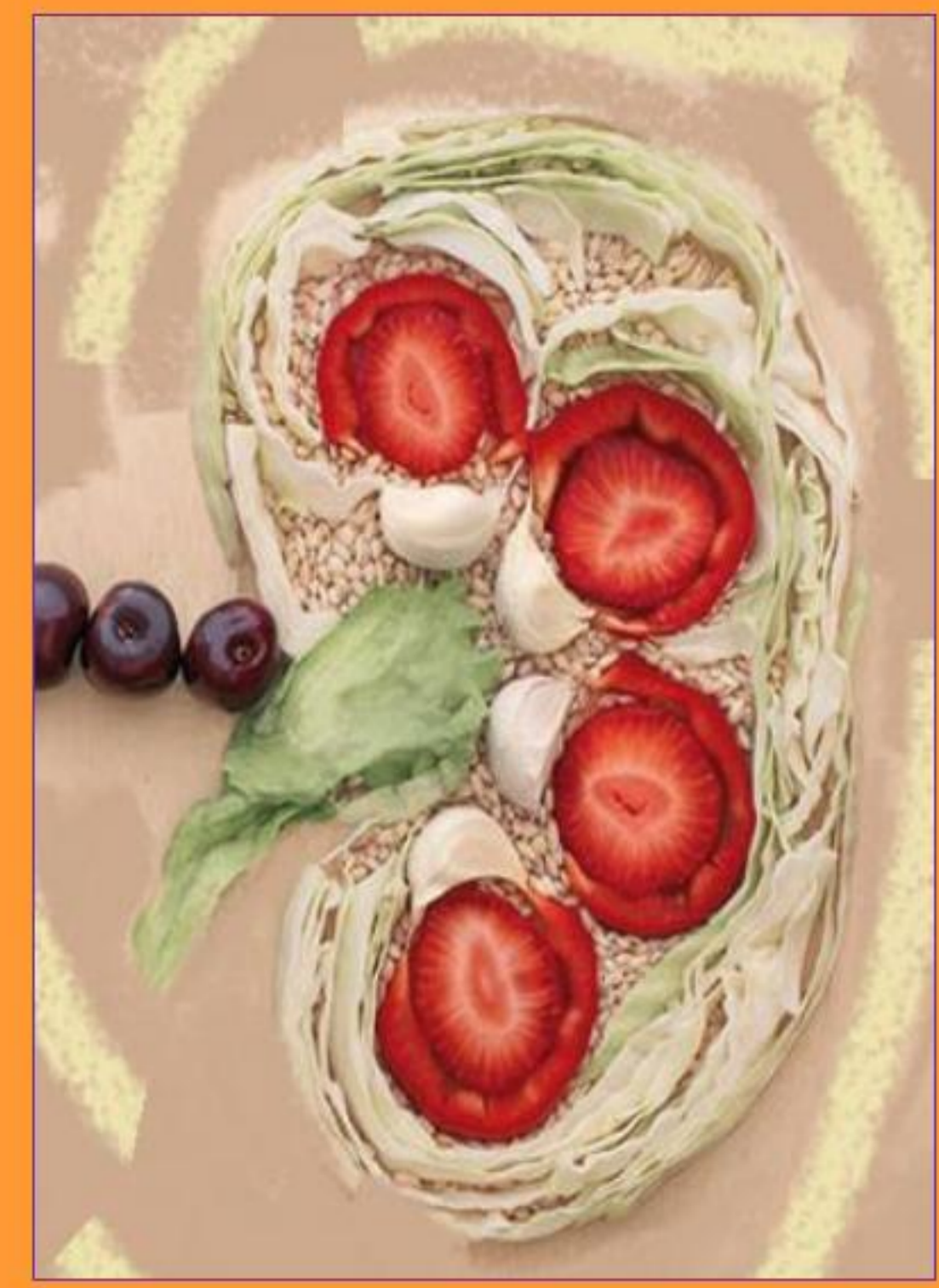
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Background and aims:

Low protein diets (LPDs) are usually mentioned as useful tools for slowing CKD progression and controlling uremic symptoms, postponing dialysis. The "best diet", if any, has not been identified and implementation is limited by concerns about compliance and safety. However, the economic world crisis, potentially limiting dialysis availability, the rising incidence of elderly patients and the failure of early dialysis to improve survival increased the interest towards LPDs.

Aim of the present study was an analysis of main clinical features of the prevalent population treated by different LPDs in a multicentre cohort of patients, in 4 Nephrology Clinical Centers in Italy, all largely employing LPDs and all offering multiple LPD choices, adapted to the clinical situations and to patients' preferences.



Methods:

Selection criteria: prevalent patients on LPD for at least 6 months. The database presently gathers 424 CKD stage III-V patients, 5 of them treated by infrequent dialysis and diet. The enrolment will continue throughout 2015 (>500 cases expected). Each Center offered at least 2, up to 4 diet options. The present analysis is focussed to describe the prevalence of the different diets and of main clinical features of the patients.

Results:

There were 263 males and 161 females. The age range was wide (19-98 years), with a median of 73 years, indicatively corresponding to the current age of start of dialysis in our area. The diet was prescribed at a mean serum creatinine of 3.3 mg/dL, corresponding to a mean MDRD eGFR of 25 mL/min. Nephroangiosclerosis and diabetes were the main causes in the elderly, while, as expected, glomerular diseases were more common in the younger patients. The Comorbidity index (Charlson index) was high (median 7; only 59 patients had an index <5, corresponding to a 53% probability of being alive at 10 years). Diet distribution included all options, with a preference for moderate protein restriction and about 10% of the cases on very-low protein diets.

(Preliminary data)

There were: Mediterranean "traditional" diet (protein intake: 0.6-0.8 g/Kg/day): 70 patients; moderate restriction (0.6 g/Kg/day): protein-free commercial food: 186 patients; vegan supplemented with alpha-ketoacids: 81 patients; other combinations of the 0.6 g/Kg/day diets: 16 patients. Vegan, supplemented very low protein diet (0.3 g/Kg/day): 71 patients.

Compliance was good, as calculated by Mitch formula (complete cases on 0.6 g/Kg/day diets: mean protein intake: 0.63 g/Kg/day).

(Preliminary data).

Conclusions:

LPDs are feasible in many CKD patients, including those who are elderly and with high comorbidity; this large multicentric survey on LPDs in Italy underlines the patients' interest for different diets, in which very-LPDs account for about 10% of the cases. This may indirectly support a multiple choice LPD approach, with wide use of moderately restricted diets.

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	Turin	Pisa	Cagliari	Solofra
Sex (n°)				
<i>M</i>	80	71	66	46
<i>F</i>	48	31	40	42
Age				
<i>Min-Max</i>	21-91	34-85	19-91	19-98
<i>Medium</i>	69	67	66	77
<i>Median</i>	75	71	71	79
<i>N[≥] 65</i>	90	62	62	77
Charlson Comorbidity Index				
<i>% ≥ 65</i>	70.3 %	60.8 %	58.5 %	88.5 %
<i>≤7</i>	48.44	61.76	54.72	37.93
<i>>7</i>	51.56	38.24	45.28	62.07
GFR MDRD:				
<i>Min-Max</i>	3,1-99	3,1-39,5	11,00-90,00	8,00-80,00
<i>Medium</i>	22,90	21,38	30,56	32,73
<i>Median</i>	21,40	21,35	29,00	30,00
<i>≤ 15 GFR (n°)</i>	35	8	26	7
<i>≤ 10 GFR (n°)</i>	16	1	12	0

