single center, open-label, randomized, prospective, parallel group study
- July 2003 - March 2006
- 2 years follow up
- Urine 24h
- ClCr 30 to 15
- Malignant disease
- Morbid obesity
- Cognitive impairment
- Chronic sepsis
- Poorly controlled BP
- Bic 3x600 until bicarbonate > 23
- Pas de sevelamer or calcium carbonate

Clinical measurements
- Nutritional assessment
- Dietary analysis
- Statistical analysis

Methods
- Study design
- Bicarbonate

Discussion
- Progression 1 ml/min vs > 2.5 ml/min
- Augmentation HTA
- Augmentation edema
- Increased sodium retention
- Increased ammonia production
- Complement cascade activation
- Injury to tubulointerstitium
- Hypothesis
- Bicarbonate has an effect on appetite

Results
- 184 incident patients with CKD and low bic
- 134 randomized

- Standard treatment: decline CrCl 5.93 ml/min
- Oral sodium bicarbonate supplementation 1.82 ± 0.8 g/d
- Dietary protein intake (bic)
- Decrease in protein catabolism (bic)
- Increased protein catabolism (control)
- Albumin (bic)
- K (bic)

Hypothesis
- Oral bicarbonate
- Bic between 16 and 20 mmol/l
- < 3 ml/min/an
- Attenuation pejoration ClCr

Discussion
- Evidence in dialysis that correction of acidosis helps
- Upregulation of ubiquitin-proteasome system
- Excessive oxidation of branched-chain amino acids
- Reduced synthesis of visceral proteins

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