



Rebalance the Scale

with

SOBIREN

Sodium Bicarbonate 500 mg Tablets

SOBIREN

Sodium Bicarbonate 500 mg Tablets

CORRECTION OF METABOLIC ACIDOSIS IMPROVES INSULIN RESISTANCE IN CHRONIC KIDNEY DISEASE

- ✓ A total of 145 CKD subjects with Type 2 Diabetes Mellitus treated with oral antidiabetic drugs were included in the study and followed up to 1 year.
- ✓ **Groups:**
Oral sodium bicarbonate group (n=71)
Control group (n=74)
- ✓ **Dosage:** Oral sodium bicarbonate is administered at the dose of 0.5 mmol/kg of body weight (1 g of sodium bicarbonate contains 11.9 mmol – initial dose about 3–4 g) two times a day.

Results:

HOMA-IR and HOMA-%B at study inception and conclusion in treated and control subjects

	Oral sodium bicarbonate group (n=71)	Control group (n=74)
HOMA-IR		
Baseline	6.4 [5.5–7.9]	6.4 [5.5–8.2]
Study Completion	5.9 [5.0–7.0]	6.3 [5.3–8.2]
P-value (within group)	0.004	0.572
HOMA-%B		
Baseline	50.5 [32.0–67.2]	43.0 [32.7–62.2]
Study Completion	60.5 [43.5–70.2]	45.0 [32.7–64.5]
P-value (within group)	0.036	0.754

HOMA-IR: Homeostatic model assessment - Insulin Resistance

HOMA-%B: Homeostatic model assessment β pancreatic cell function

- ✓ Treated patients showed a better metabolic control as confirmed by lower insulin levels (13.4 ± 5.2 vs 19.9 ± 6.3 ; for treated and control subjects respectively; $p < 0.001$), HOMA-IR ($5.9 [5.0-7.0]$ vs $6.3 [5.3-8.2]$; $p = 0.01$) and need for oral antidiabetic drugs.

Conclusion: Metabolic acidosis is linked to insulin resistance in diabetic, chronic kidney disease patients and oral bicarbonate administration corrects metabolic acidosis that, in turn, improves insulin sensitivity in this population.

SOBIREN

Sodium Bicarbonate 500 mg Tablets

BACKGROUND:

- ✓ Incidence of chronic kidney disease (CKD) as well as the prevalence of diabetic subjects among CKD patients are steadily increasing. As renal function declines, metabolic acidosis, and insulin resistance (IR) commonly arise.
- ✓ Metabolic Acidosis is defined as a reduced serum pH, and an abnormal serum bicarbonate concentration of <22 mEq/L, below the normal range of 22 to 29 mEq/L.
- ✓ Metabolic acidosis is commonly found in patients with chronic kidney disease (CKD), and its causes are: impaired ammonia excretion, reduced tubular bicarbonate reabsorption and insufficient renal bicarbonate production in relation to the amount of acids synthesized by the body and ingested with food.
- ✓ Metabolic Acidosis is a clinical state characterized by an excess of hydrogen ions. Therefore, bicarbonate is a logical therapy for metabolic acidosis, because this fundamentally reflects a bicarbonate deficiency.

DESCRIPTION:

- ✓ **Sobiren** contains Sodium bicarbonate which is a chemical compound with the formula NaHCO_3 . It is a salt composed of sodium ions and bicarbonate ions. It is used to correct acidosis, where insufficient bicarbonate ions are present in the blood.

INDICATION:

- ✓ **Sobiren** is indicated for the management of Metabolic Acidosis in Diabetic Kidney Disease patients.

MECHANISM OF ACTION:

Sodium bicarbonate dissociates to provide bicarbonate ions which neutralizes hydrogen ions and raises blood and urinary pH.

- ✓ Alkalizer, systemic—Increases the plasma bicarbonate, buffers excess hydrogen ion, and raises blood pH, thereby reversing the clinical manifestations of acidosis.
- ✓ Alkalizer, urinary—Increases the excretion of free bicarbonate ions in the urine, thus effectively raising the urinary pH. By maintaining alkaline urine, the actual dissolution of uric acid stones may be accomplished.

DOSAGE:




The recommended starting dose for metabolic acidosis is 1 to 4 Tablets orally in a day in divided doses or as directed by the physician.

References:

- 1) BMC Nephrology (2016) 17:158
- 2) Kidney Blood Press Res 2018;43:959–969

La Renon Healthcare Private Limited

207-208 Iscon Elegance, Circle P, Prahlad Nagar Cross Roads,
S.G. Highway, Ahmedabad-380015, Gujarat, India.
Phone: + 91-79-6616-8998, 2693-6656 | Fax: +91-79-6616-8998
E-mail: info@larenon.com | Web: www.larenon.com

 I am: _____
 Call me on: _____
 Mail me at: _____

© 2021 All rights reserved, La Renon Healthcare Private Limited