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## The Management of salt and electrolytes in Geriatrics with Homoeopathic Similimum and ORS supplement.

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### ABSTRACT

Geriatric patients are predisposed to salt and electrolyte imbalance due to various systemic and daily management causes. This may lead to dry mouth, restlessness, fatigue, muscle spasms, palpitations etc. Homoeopathic medicines has been treating well these conditions. Total 10 patient of geriatric age group suffering from salt and electrolyte imbalance in outpatient department were selected for study. These patients in out-patient department, were prescribed Homoeopathic similimum along with ORS as a supplement. It was observed that when these patients are given Homoeopathic Similimum along with ORS supplementation, the recovery was quick and comprehensible. The integration of homeopathic remedies with ORS provides a promising method for the quick, safe, and effective recovery from salt and electrolyte imbalances in geriatric patients.

**Keywords:** Geriatric patients, ORS supplement, Homoeopathic similimum

### INTRODUCTION

As people age, their kidneys undergo changes such as glomerulosclerosis, reducing their ability to filter blood and regulate electrolytes<sup>(1)(6)</sup>. This decline in kidney function, combined with decreased body water and muscle mass, makes elderly individuals more susceptible to imbalances like hyponatremia and hypernatremia<sup>(1)</sup>. Consequently, even minor dehydration can significantly impact physical, cognitive, and visual performance<sup>(1)</sup>. Under stressful conditions, the ability to maintain homeostasis may be hampered, making them more vulnerable to hyponatremia, hypernatremia, volume depletion, volume overload, hyperkalemia, and metabolic acidosis<sup>(2)</sup>.

### PATHOPHYSIOLOGY

Older adults are prone to dehydration and electrolyte imbalances due to various factors, including physical limitations that restrict fluid intake and issues like polypharmacy and unmonitored use of diuretics and other medications. Following are the causes of electrolyte imbalance in elderly patients<sup>(2)(3)</sup>.

- **Physiological changes in water balance:** With age, the body's ability to regulate water balance declines, leading to reduced renal concentrating ability and increased risk of dehydration.
- **Renal senescence:** Aging kidneys experience reduced glomerular filtration rate and tubular function, impairing fluid and electrolyte balance and increasing susceptibility to renal disorders.
- **Hormonal changes and ageing:** Aging affects hormone regulation, including those involved in fluid balance like antidiuretic hormone (ADH) and aldosterone, which can impact water retention and blood pressure.

- **Thirst response:** Older adults often have a diminished thirst response, reducing their ability to recognize and respond to dehydration effectively.
- **Prescribing in older adults:** Medications need to be carefully prescribed and adjusted for older adults due to altered pharmacokinetics, potential interactions, and increased sensitivity to side effects.
- **Dehydration and the environment:** Environmental factors such as heat and humidity can exacerbate dehydration risks in older adults, who may have reduced physiological responses to these conditions.
- **Dehydration and cognitive impairment:** Dehydration in older adults can contribute to cognitive decline, confusion, and impaired mental function due to changes in brain hydration and electrolyte balance.
- **Physiological changes during the perioperative period:** During surgery, older adults face increased risk of fluid imbalances, altered stress responses, and slower recovery due to changes in cardiovascular and renal function.

#### Electrolyte abnormalities in older adults <sup>(2)(5)(10)</sup>:

- **Hypertonic dehydration:** More water than sodium is lost, often due to age-related thirst impairment, leading to high serum sodium levels (>145 mmol/L) in dehydration.
- **Hypotonic dehydration:** More sodium is lost than water, commonly due to diuretics, resulting in low serum sodium levels (<135 mmol/L).
- **Isotonic dehydration:** Proportional loss of water and sodium keeps serum sodium levels normal; often caused by diarrhea.
- **Dysnatraemia:** An imbalance in sodium levels, often seen in older adults, reflecting an altered osmolar state. Conditions like SIADH and hyperglycemia frequently cause sodium imbalances in older adults.
- **Hyponatremia:** Low sodium levels, more common in older adults, increases fracture risk and can result from various conditions.
- **Iatrogenic causes of dysnatraemia:** Use of diuretics or excessive hypotonic fluids can disrupt sodium balance.
- **Hypernatremia:** High sodium levels due to increased salt intake or reduced kidney function in older adults, as they excrete salt more slowly.
- **Hyperkalemia:** Elevated potassium levels from impaired kidney function, a result of age-related decline in renal tubular function.

## MATERIAL AND METHODS

10 cases were selected from outpatient department in Nasik for the study. These patients belong to geriatric age group and suffering from set of symptomatology referring to electrolyte and salt imbalance. These patients were treated with Homoeopathic similimum alongwith ORS as a supplement. Symptomatic improvement was observed to draw the result.

## RESULT

Total 10 cases were studied from outpatient department, were recovered from the electrolyte and salt imbalance after prescribing Homoeopathic similimum and ORS as a supplementation. Overall improvement was seen in all patients.

## DISCUSSION

Geriatric patients are often at risk of salt and electrolyte imbalances due to various physiological changes and underlying health conditions. This imbalance can lead to symptoms such as dry mouth, restlessness, fatigue, muscle spasms, and palpitations. The causes of salt and electrolyte imbalance include renal function impairment, hormonal changes, and diuretic medications. Treatment should involve rational medications and supplementation to replace lost salts. Homeopathic remedies, tailored to the individual's symptoms and overall health profile, can effectively address these imbalances. Homeopathy uses highly diluted substances that match the patient's symptoms to promote a healing response. According to Dr. Robert's philosophy, psora represents a deficiency that impairs patient health. Homeopathic medicines have the potential to overcome the pathology causing this deficiency and address the miasm. Oral Rehydration Solutions (ORS) are designed to replace lost fluids and electrolytes efficiently, typically used to manage dehydration and electrolyte loss due to diarrhea, vomiting, or other causes.

In treating 10 elderly patients, we observed salt and electrolyte deficiencies and prescribed Homeopathic Similimum based on the totality of symptoms, along with ORS supplements for a few days. Our observations suggest that combining homeopathic similimum with ORS results in a more rapid and effective recovery. This combination seems to provide both symptomatic relief and practical electrolyte replenishment, addressing the imbalance from multiple angles. The synergy between homeopathic remedies and ORS could offer a comprehensive approach to treating electrolyte imbalances. Homeopathy may address the underlying systemic and symptom-specific issues, while ORS directly replenishes essential fluids and electrolytes. This integrated approach could pave the way for further research into the efficacy and safety of combining traditional and complementary treatments and lead to improved protocols for managing electrolyte imbalances in geriatric populations. Overall, while our observations are promising, systematic studies are needed to validate these findings and understand the mechanisms behind the observed benefits, which could help in formulating evidence-based guidelines for integrating homeopathic treatments with conventional electrolyte management strategies.

## CONCLUSION

The integration of homeopathic remedies with ORS provides a promising method for the quick, safe, and effective recovery from salt and electrolyte imbalances in geriatric patients. This approach not only addresses the immediate symptoms but also supports overall electrolyte balance, contributing to better patient outcomes.

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