Cerebral small vessel disease (SVD) is a complex brain disorder resulting from damage to the blood vessels and tissue in the brain, which progressively deteriorates with age.

Diverse clinical presentations of the disease and frequent overlap with other co-morbidities, make its timely diagnosis and management challenging.

How can screening, diagnosis, and treatment of SVD be enhanced for better patient outcomes?

Comprehensive review of over 10,000 articles on SVD describes:
- Silent or asymptomatic lesions
- Cognitive impairment
- Neurological deficits
- Stroke
- Physical dysfunction
- Gait imbalance
- Psychosocial symptoms

Risk factors for SVD progression:
- Vascular – age, hypertension, and diabetes
- Lifestyle factors
- Genetic and environmental factors
- Specific lesions from neuroimaging

Treatment approaches:
- Lifestyle and behavioral interventions
- Stroke prevention
- Reduction of blood pressure
- Control of lipid levels

Pharmacological interventions being tested:
- Cilostazol
- Nitric oxide donors
- Vitamin supplementation
- Xanthine oxidase inhibitors
- Remote ischemic conditioning

Clinical management of cerebral small vessel disease: a call for a holistic approach