Guest Lecture

Chronic Pain Management in Elderly

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Pain is one of the most common debilitating symptoms that bring a patient to a health care facility. This distressing sensation generalized or confined to a particular part of the body has profound negative implications in the quality of life of the elderly population. Pain can be the reason not only for physical but also for emotional, spiritual as well as social disturbance in the elderly resulting in a wide spectrum of disabilities. Despite that there is an existing huge perception that many elderly have pain which is often 'expected as part of ageing' or something that they have to 'learn to live with'. Pain is one of the patient's symptoms that demands utmost attention from the care-givers, both medical and non-medical.

International Association for the Study of pain (IASP) defines pain as "An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage."[1] Chronic pain is often defined as any pain lasting more than 12 weeks.[2] Chronic pain may arise from an initial injury or there may be an ongoing cause, such as illness. There may not even be a well defined cause for pain perceived by an elderly; the condition which poses greater challenges for making an elderly lead a pain-free life.

With age, the prevalence of chronic pain increases. As pain is considered a part of 'ageing process', there is paucity of studies which provide realistic data on incidence and prevalence of chronic pain in the elderly population. Based on different studies, the prevalence of chronic pain in older people living in the community ranged from 25 to 76%.[3] But substantial differences in the population, methods and definitions used in published research make it difficult to compare across studies and impossible to determine the definitive prevalence of pain in older people.[4]

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Pain results from variety of conditions both in the community and the residential settings. Because of the presence of various barriers related to the older people themselves as well in the care-givers, identification and management of chronic pain has been very challenging. One of the most important barriers is 'communication' which is more frequent among individuals with sensory or cognitive impairment. Regarding the sites of pain, the three most common sites in older people are the back; leg/knee or hip and other joints.[4] The most common morbidities associated with chronic pain in the elderly are rheumatic diseases (osteoarthritis, rheumatic arthritis), cancer, angina, post-herpetic neuralgia, temporal arteritis, peripheral neuropathy, trigeminal neuralgia and peripheral vascular disease.[5]

Evaluation of pain symptoms in the elderly should be a part of an interdisciplinary approach and it begins with detailed history associated with pain and the co-morbidities, including the socio-economic and cultural background of the patient and physical examination pertaining to the symptoms of the patient. The severity of pain should be assessed with the aid of 'WHO Pain Scale', as the ultimate pharmacological management depends upon the severity of the symptom. Along with the functional status, presence of depression, sensory and cognitive impairment should be assessed in the patient. Noting the temporal relationships among events, medical interventions, and complaints helps elucidate the diagnosis and likely prognosis.

Pharmacotherapy is generally the first and most widely used treatment modality to control geriatric pain. The health care professional initiating the drugs should be aware of the alteration in pharmacokinetics and pharmacodynamics as well as the accentuation of adverse drug reactions with ageing. American Geriatric Society (AGS) recommends acetaminophen, not exceeding 4g per 24 hours, as initial and ongoing pharmacotherapy in the treatment of persistent

pain, particularly musculoskeletal pain, owing to its demonstrated effectiveness and good safety profile.[6] Acetaminophen is absolutely contraindicated in liver failure and should be cautiously used in patients with hepatic insufficiency and in patients with alcohol dependence.[6]

In case the therapeutic goals are not met with acetaminophen, initiation of non-selective non-steroidal anti-inflammatory drugs (NSAIDs) or selective cycloxygenase-2 (Cox-2) inhibitors with great caution seems reasonable. AGS recommends the use of proton-pump inhibitors or misoprostol for gastrointestinal protection in patients taking non-selective NSAIDS or patients taking COX-2 selective inhibitor with aspirin. Similarly, such patients should be routinely assessed for gastro-intestinal and renal toxicity, hypertension, heart failure and other drug-drug interactions.[6]

Similarly, AGS recommends the use of opioids for patient with severe pain, pain-related functional impairment or diminished quality of life because of pain. In cases of frequent or continuous pain on a daily basis, the patients may be treated with round-the-clock time-contingent dosing aimed at achieving steady-state opioid therapy. Anticipation, assessment and identification of potential opioid-associated adverse effects is warranted. Similarly, when long-acting opoid preparations are prescribed, breakthrough pain should be anticipated, assessed, and prevented or treated using short acting immediate-release opoid medications.[6]

Similarly, all patients with neuropathic pain, fibromyalgia, and other types of refractory persistent pain are the candidates for certain adjuvant analgesics. AGS is against the use of tricyclic antidepressants owing to the higher risk of anticholinergic side effects and possible cognitive impairment in the elderly.[6]

Thus, management of pain in an elderly demands an interdisciplinary individualistic approach. The patient and the care-givers' concern should the centre of management. An interdisciplinary approach is recommended to investigate all possible options for optimal management, including pharmacotherapy, interventional procedures, physical rehabilitation, and psychological support. "Start low, go slow", should always be the basic principle of geriatric pharmacology in the management of chronic pain as well as other disorders of old age.

Key Learing points

1. With age, the prevalence of chronic pain increases. As pain is considered a part of 'ageing process', there is paucity of studies which provide realistic data on chronic pain in the elderly population.
2. The health care professional initiating the analgesics and/ adjuvant drugs should be aware of the alteration in pharmacokinetics and pharmacodynamics as well as the accentuation of adverse drug reactions with ageing.
3. "Start low, go slow", should always be the basic principle of geriatric pharmacology in the management of chronic pain as well as other disorders of old age.

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