Editor’s view

Pathogenesis and management of osteoarthritis

Osteoarthritis (OA) is a major cause of musculoskeletal pain and disability in older people, yet we have published few research papers dealing specifically with the condition in the past decade. The New Horizons article in this issue on the pathogenesis and management of OA is therefore particularly welcome (pp. 272–278). This highlights that OA involves the whole joint, with inflammation of the synovium, cartilage damage and breakdown and changes in the subchondral bone. Genetic susceptibility to OA may be influenced by polymorphisms in the genes regulating cytokines, metalloproteinase, prostaglandins, and bone morphogenic protein. The use of new imaging modalities such as magnetic resonance imaging (MRI) and ultrasound (US) has provided new insights into the changes occurring in OA and their relationship to joint pain and disease progression. Although MRI and US remain largely research-based tools, it is likely that they will prove useful in clinical practice in due course, as they provide more information than standard radiographs. Current treatments for OA comprise pharmacological treatments such as paracetamol, non-steroidal anti-inflammatory drugs (NSAIDs), opioids, and steroid injections, together with non-pharmacological interventions like physiotherapy and the use of walking aids and appliances. The New Horizons article points out that although these treatments may lead to a modest improvement in symptoms, they do not modify disease progression, while drugs such as NSAIDs, opioids and paracetamol may be associated with significant morbidity in older people. Potential new approaches to the treatment of OA have targeted inflammation with methotrexate and monoclonal antibodies against tumour necrosis factor, subchondral bone with bisphosphonates, strontium ranelate and calcitonin, and central pain with duloxetine, tapentadol and bradykinin receptor antagonists. The authors underline that structural modification remains the ‘holy grail’ in OA research, but point out that recent research suggests that strontium ranelate has the potential for modifying disease progression in OA. Hopefully, recent advances in our understanding of the pathogenesis will not only alter the perception of OA as a degenerative condition which is an inevitable consequence of ageing, but also lead to the development of effective treatments.

Abuse of community-dwelling older people

There is a growing literature on abuse of older people, which may range from psychological, physical, sexual or financial abuse to neglect. Although estimates of the prevalence of abuse of older people are variable, a systematic review published previously in this journal suggested that 6% of community-dwelling older people reported significant abuse in the past month (Age Ageing, 2008; 37: 151–60). A systematic review in this issue has examined the risk factors for abuse in community-dwelling older people (pp. 292–298). The authors classified risk factors in the perpetrator, the older person, their environment and relationships. They identified 49 relevant studies, 27 of which they considered to be of higher quality and 22 of lower quality. Of the 37 statistically significant risk factors found, in these studies, 13 were identified in at least four of the higher quality studies. Risk factors in the abused older person included cognitive impairment, behavioural problems, psychiatric illness, functional dependency, poor physical health, low income, past abuse and ethnicity. Among the perpetrators, risk factors comprised caregiver burden or stress, psychiatric illness and psychological illness. Risk factors associated with relationships were dis harmony in the family and conflicts, whereas those related to the environment were living with others and low levels of social support. The authors conclude that abuse of older people is multifactorial in origin, involving risk factors in the older person, perpetrator, relationships and environment. They express the hope that future research will ultimately lead to the development of screening tools for health care professionals and appropriate strategies for intervention.

Future cost of stroke in Ireland

It has been estimated that the annual cost of stroke in Ireland in 2007 was between €489–805 million, with much of the expenditure related to the chronic phase of the disease (Age Ageing, 2012; 41: 332–8). A further research paper from the same authors investigates the effect of projected demographic and epidemiological trends on the total cost of stroke in Ireland from 2007 to 2021 and estimates the economic impact of improved access to stroke unit care and thrombolysis treatment (pp. 299–306). The authors suggest that demographic trends alone will result in a 58% increase in the number of stroke cases from 2007 to 2021, with projected costs of between €743 and 1,266 million without adjustment for inflation. They have then analysed the economic impact of stroke unit care and thrombolysis on mortality, dependency and institutionalisation, using different estimates of the numbers needed to treat and various levels of access to stroke unit care and thrombolysis. The authors conclude that although improved access to stroke units and thrombolysis will increase the cost of stroke care, this will be offset in part by improved outcome and reduction in the need for nursing home placement.

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