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Men's health–the impact of stroke

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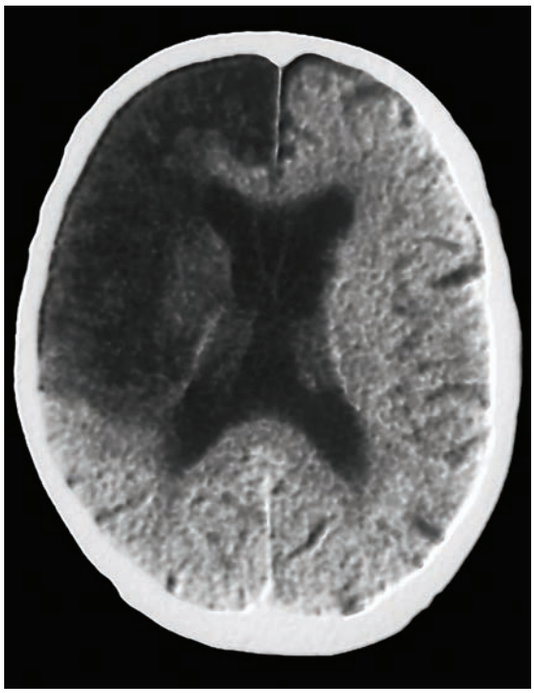
Stroke is a leading cause of adult death and the most common cause of complex disability in the UK. This article discusses the incidence and impact of stroke, focusing on a range of issues from a male perspective, including stroke prevention, psychological needs, sexuality and return to work. There are some gender differences in modifiable risk factors for stroke, and women have better knowledge of stroke symptomatology. For men, the development of post-stroke depression is associated with greater physical disability.

INTRODUCTION AND EPIDEMIOLOGY

Each year in the UK, around 152,000 people will have a stroke, and about 1.2 million people in the UK have had a stroke at some point.[1] Stroke is the second largest single cause of death in the UK,[2] and it is the leading cause of complex disability.[3] In 2009, the cost of stroke to the UK was estimated to be over £8 million.[1]

The incidence of stroke is 25% higher in men than in women.[1] Men's stroke mortality is, however, lower than women's: in 2009 there were 19,009 male deaths due to stroke compared with 30,289 female deaths.[4] This difference is largely due to the age profile of stroke in men and women: men are more likely than women to experience stroke at a younger age, when the chance of survival is higher.



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GENDER ISSUES IN STROKE PREVENTION

There are some gender differences in modifiable risk factors for stroke. More men (37%) than women (29%) regularly exceed weekly recommended alcohol limits, while 21% of men and 14% of women engage in binge drinking.[1] There is little difference in dietary habits and total cholesterol, but men are five times more likely to have unfavourable lipid profiles, with low levels of high-density lipoprotein (HDL) cholesterol. Around 42% of men and 32% of women are overweight; a further 25% of men and 28% of women are obese.[1] Diabetes mellitus is also more common in men (6%) than women (4%). There is little difference between the sexes in smoking and activity levels, but high blood pressure is more common in men (32%) than women (29%). Atrial fibrillation is slightly more common in men, but appears to confer a higher stroke risk for women.[5]

There are also gender differences in awareness of stroke risk factors. Women are more likely to identify high blood pressure, existing cardiovascular disease and diabetes whereas men are more likely to identify stress, alcohol consumption and low physical activity as stroke risk factors.[6]

The impact of primary prevention measures on stroke incidence may be different in men and women. Dietary fat intake modification is known to reduce men's risk but is unproven in women.[7] Aspirin for primary prevention appears to reduce women's but not men's stroke risk, yet it does reduce men's risk of coronary artery disease.[8] Asymptomatic

POINTS FOR THE CLINIC

- Men's knowledge of common stroke risk factors and symptoms is poorer than women's
- Men are less likely to seek, and receive, effective treatment for known risk factors such as hypertension
- Depression following stroke is associated with different factors for men and women
- A return to work should be an integral part of stroke rehabilitation

BOX 1: THE ABCD2 SCORE

Add up the score to find whether the patient is at higher or lower risk of stroke.

Age: 60 years or above – 1 point
Below 60 years – 0 points

Blood pressure 140/90 mmHg or above – 1 point
Below 140/90 mmHg – 0 points

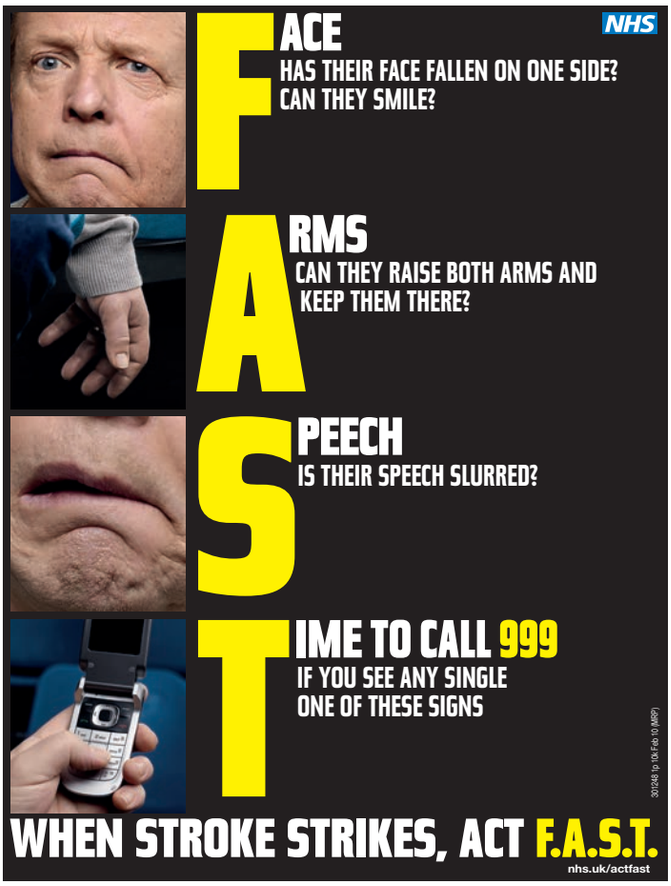
Clinical features: unilateral weakness – 2 points
Speech disturbance with no weakness – 1 point
Amaurosis fugax only – 0 points

Duration of symptoms: 60 minutes or longer – 2 points
10 to 59 minutes – 1 point
Less than 10 minutes – 0 points

Diabetes: presence of diabetes – 1 point
No diabetes – 0 points

Score 4 or above – high risk
Score 3 or below – low risk

If a patient reports having two or more episodes in a week, they should be treated as high risk, even though their ABCD2 score may be 3 or less.



carotid stenosis confers a higher risk of stroke in men than in women.[9]

Men may face additional barriers to accessing and taking up stroke prevention measures in primary care. Younger men have had the lowest uptake of the NHS Health Checks programme.[10] This group tends to attend primary care infrequently, and usually for acute problems rather than for primary or secondary prevention.[11] As a result, men may be undertreated even for known risk factors. Fifty-three percent of men and 41% of women are not receiving any treatment for their high blood pressure.[1] Control of hypertension[12] and adherence to antihypertensives[13] are worse in men than women, with younger men (<50 years) being the group most likely to be undertreated.[14]

ACCESS TO EMERGENCY HELP IN ACUTE STROKE

Public awareness has been highlighted in the National Stroke Strategy[15] as an essential factor in people's recognition and response to actual or suspected acute stroke symptoms. Campaigns to boost recognition of stroke symptoms include the ACT FAST campaign (see poster at foot of this page). Women have better knowledge of stroke symptomatology than men, and their knowledge improves to a greater extent following public awareness campaigns.[16,17] Stroke is a time-dependent medical emergency in which rapid access to specialist care reduces death and dependency.[18] Calls to emergency medical services at the onset of stroke symptoms are most often made by a female family member, often the patient's daughter.[19] Future public awareness campaigns may need to consider improving men's stroke knowledge about the emergency response that is required.

TRANSIENT ISCHAEMIC ATTACK

The symptoms of a transient ischaemic attack (TIA) last less than 24 hours, with most TIAs resolving within 30 minutes of onset. However, having a TIA confers a high risk of subsequent stroke, particularly within the first 72 hours.[20] Early specialist assessment is important for accurate diagnosis and secondary prevention in those patients who are not admitted to hospital. The incidence of TIAs is significantly higher in men than in women (101 versus 70 cases/100,000/year).[21]

If a TIA is suspected, the patient should be assessed in a specialist neurovascular clinic within seven days for those at lower risk, and within 24 hours for those at higher risk. Higher risk patients are those who have an ABCD2 score of 4 or more[22] (Box 1). A slightly larger proportion of men than women with TIA have an ABCD2 score of ≥4 (53% versus 47%, respectively).[23]

There are guidelines from the National Institute for Health and Clinical Excellence (NICE) to help with safe and effective management of suspected TIA. One of the algorithms from NICE CG68 is shown in Figure 1.

PSYCHOLOGICAL NEEDS AFTER STROKE

The development of post-stroke depression (PSD) is associated with different factors in men and women. For males, PSD has been found to be associated with greater physical disability which can result in an inability to leave the house, continue to work or pursue leisure activities. For women, greater severity of PSD is associated with prior diagnosis of psychiatric disorder and cognitive impairment.[24] However, PSD in both men and women is correlated with greater impairment in activities of daily living such as communicating, washing, bathing and dressing.[25]

Figure 1: Clinical algorithm for the management of suspected transient ischaemic attack, taken from NICE CG68

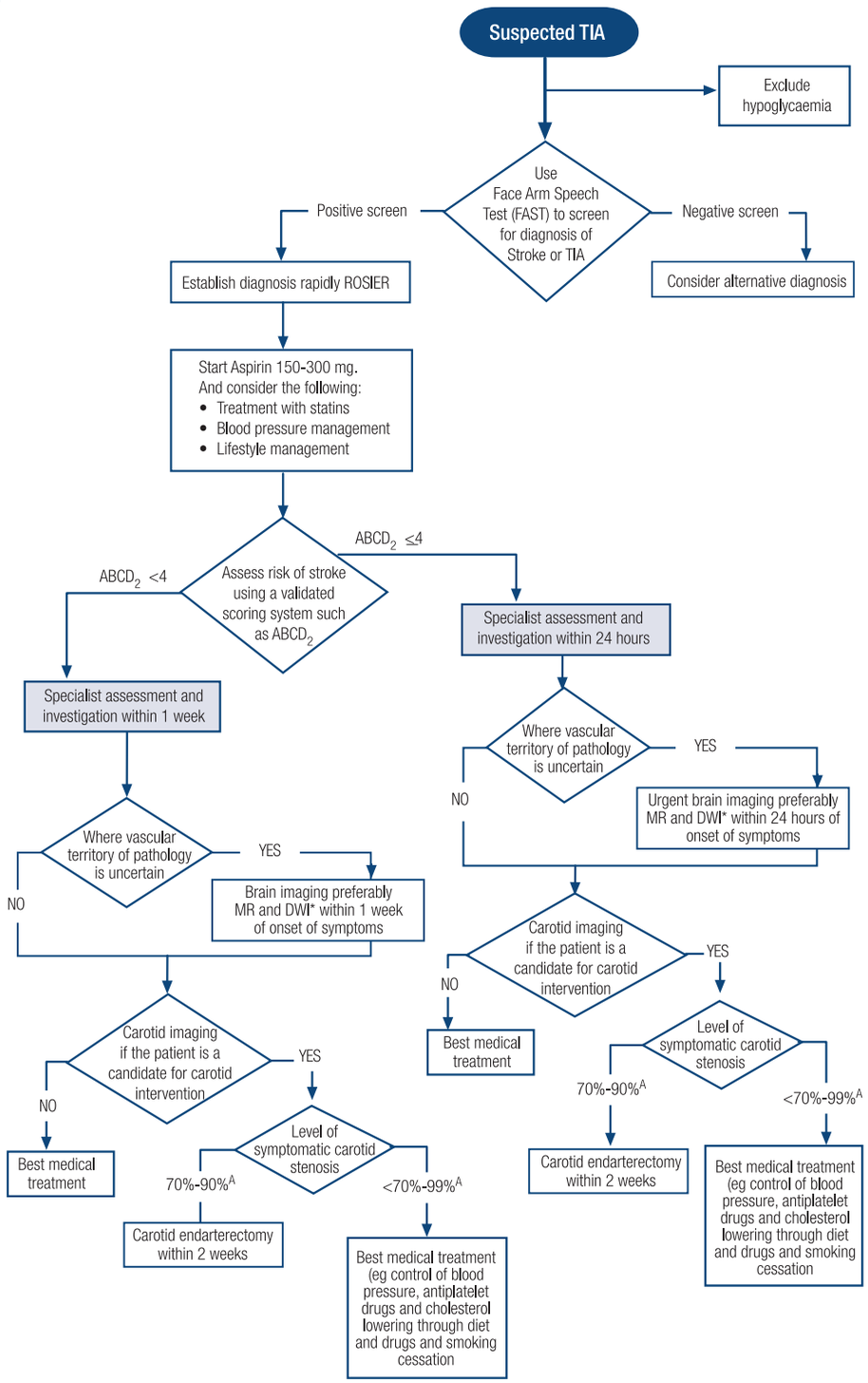


Figure reproduced from National Institute for Health and Clinical Excellence. Issued: July 2008. www.nice.org.uk/CG68

The physical consequences of stroke, potentially exacerbated by confusion and deteriorating memory, can have great psychological implications for men. They can be left feeling inadequate, frustrated and reliant on others. It is therefore understandable that many men develop depression following stroke. In addition, it has also been found that men with PSD tend to perceive their social support as less adequate compared with those without PSD.[22]

Men need both psychological and social support after stroke, particularly because they are more likely than women to experience PSD.[26] Knowledge of men's reluctance to seek help for psychological problems should be taken into consideration by health professionals when dealing with stroke survivors.

THE IMPACT OF STROKE ON ROLE IDENTITY AND SEXUALITY

Stroke survivors commonly demonstrate a more negative self-concept post-stroke[27] and have an altered sense of identity.[28] Changes to roles associated with male status, such as the inability to resume the role of the family income provider, may be particularly difficult.[29] Enforced changes to pre-existing roles create frustration and helplessness.[30] Healthcare professionals should attempt to understand what is most meaningful to the individual[31] and specific to their gender in order to help maintain the most important aspects of identity. Stroke survivors' experiences of nursing care are framed by their role identity. Male patients may try to protect their partner from worry by avoiding expressing their feelings, even to nursing staff.[32] Sexual and relationship issues are rarely discussed with patients during the rehabilitation process[33] despite their integral relationship with role and identity. Many stroke survivors experience a decrease in sexual activity and libido, and feel unable to satisfy their partner, leading to loss of confidence about their role within the relationship. They also feel uncomfortable talking about their sex lives.[34] Health professionals can make it easier for patients and their partners to talk about these issues by initiating the conversation, but it is essential that they have appropriate training to provide

the correct atmosphere and information specific to individual patient needs. Further guidance is published by Chest Heart and Stroke Scotland[35] and the Stroke Association.[36]

RETURN TO WORK AFTER STROKE

The increased incidence of stroke in people of working age, and changes in retirement age, mean that for many stroke survivors a return to work is an essential consideration. However, research into strategies to promote return to work has received little attention.

Approximately half of stroke survivors return to work,[37,38] with higher proportions among younger previously employed people.[39,40] Working age men are three times more likely to return than women, and have greater odds of returning if they are able to walk, have preserved cognitive capacity or are in white collar work.[37,39,41] Although disability severity affects work outcomes, it is not the strongest indicator. Believing that work is important, not seeing oneself as a burden on others and having support from loved ones have been found to be more important determinants of who returns.[40] Post-stroke rehabilitation may act as a barrier to work return in that its provision is patchy,[42] it ends prematurely[43] and it may not address work needs.[44] The needs of people with less disabling strokes or hidden disabilities may be missed. One limitation of existing care is that stroke survivors may be prematurely written off by healthcare professionals who make assumptions about their ability to work based on the nature of stroke deficits and the previous employment role. It may be possible to negotiate with an existing employer to enable a return to a different role with different responsibilities. Occupational therapists are well placed to support this process.[45]

SUMMARY

The personal and social consequences of stroke are important to consider for men and women. Not only can stroke result in death and disability but the psychosocial impact on patients and their families can also be devastating. Depression, anxiety, family tensions and financial problems are all common after stroke and should be taken into account by healthcare professionals.[46]

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