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CAROTIDYNIA IN THE ELDERLY

Summary

Carotidynia is a not uncommon cause of head, face and neck pain but is seldom recognized in clinical practice. Eight patients are described with characteristic features. The condition is a vascular pain and responds to drugs used for migraine prophylaxis.

Introduction

Among the many causes of head, neck and face pain, carotidynia is a distinct syndrome which often remains unrecognized. It has received scant acknowledgement, especially in British literature. Fay (1932) coined the term carotidynia to draw attention to the unusual tenderness of the carotid artery near the bifurcation in some cases of atypical facial neuralgia. Carotidynia has been defined (Editorial 1967) as pain arising from either or both extracranial carotid arteries due to dilatation or distension affecting the ipsilateral side of the face, neck, ear and head.

Eight cases occurring in elderly patients are reported. Clinical features of the patients are given in the Table.

Discussion

Unilateral or bilateral head, face and neck pain related to abnormalities in and around an extracranial carotid artery is not uncommon. Clinicians trying to elucidate the specific cause of such pain should consider carotidynia as a probability when carotid artery tenderness is the only significant finding. Other organic causes such as giant-cell arteritis, local lymphadenitis or malignant infiltration resulting in carotid artery tenderness are easily excluded.

Fay (1927, 1932) first used the term to denote the tenderness in the carotid arteries in some cases of atypical facial neuralgia where he had to perform denervation of the artery to obtain relief. He also demonstrated that electrical stimulation of the extracranial carotid arteries, especially at the bifurcation, can trigger pain in the scalp, jaw, deep in the eye, ear, teeth, gum and head. Similar findings were reported by Heymanovitch (1936). Hilger (1949) in his dissertation on carotid pain, described angiodilation of the carotid artery and its branches as a common cause of pain in the regions of head and neck. He attributed autonomic dysbalance as a cause, and commented that palpable dilatation and tenderness in the carotid bifurcation may persist long after the acute

Table. Clinical features of the eight patients

Sex: age (years)	*Pain symptoms*	*Quality*	*Duration of illness*	*Frequency*	*Duration of attack*	*Physical examination of carotid arteries*
F: 85	R lower jaw and sensation of swelling On Tegretol	Jabbing	4 years	3–4 times/ week	20–30 min	R tender
F: 70	R neck, face, temple Occasional black spots	Throbbing excruciating	6 months	Daily 1–2 attacks	30–60 min	R tender
F: 91	Head, R temple, face Floating black spots	Throbbing	8 months	Daily Nocturnal attack	1–2 h	R tender
F: 85	R ear Swelling of gland R neck	Throbbing	6 weeks	Daily 1–2 attacks	10–15 min	R tender
M: 82	L side of head, temple, side of neck	Throbbing	3 months	3–4 times/ week	30–60 min	L tender
M: 78	R face, behind the eye, temple		2 years	2–3 times/week worse lately	1–2 h	R tender
F: 80	R half of head Gold lines in front of eye P/H migraine	Throbbing	4 years	Off and on Lately daily	2–4 h	R tender
F: 75	Head, temples, side of neck P/H migraine until menopause	Throbbing	5 years	Off and on Worse last 6 weeks	1–2 h	R tender L tender

Investigations: Routine haemogram and ESR normal. Skull and chest radiography normal. Five patients had temporal artery biopsy with no evidence of arteritis. Four patients had brain scan with no abnormality.

painful phase subsides. Lovshin (1960) described 100 patients (female:male ratio, 4:1), seen over a period of two years, with an age range of 10 to 79 years, of whom 11 were above the age of 60 but the majority were in the fourth and fifth decades. Patients presented with 'recurrent sore throat' and 'swollen glands' in the neck with no evidence of actual upper respiratory tract infection or any other organic disease. Pain centred around the carotid bulb and radiated up to the ear, postauricular area and mandible. Carotid artery tenderness was present in 73% and absent in the remainder who were not having a bout of neck pain at the time of examination. Lovshin commented that over 50% of these patients had previously sought medical help but were not diagnosed. They were subjected to repeated courses of antibiotics (13), dental extractions (9),

subtotal thyroidectomy (2), a course of cortisone (2) and one patient had the jaw bone scraped with no relief.

Martorell (1961) described painful dilatation and hyperpulsatility of the carotid artery in several patients who subsequently responded favourably to ergotamine. Davies (1961) reported six patients with carotid pain, two of whom had a definite history of migraine, as also in the cases published by Ford (1965). Saunders (1962) suggested viral aetiology of carotidynia noting increased frequency during the cold weather.

Evans and Steinberg (1962) demonstrated distension of the carotid body with a selective transcarotid arteriogram. Rashkin and Prusiner (1977) studied eight women (aged 39–77 years) with episodic carotidynia of 1–19 years duration. All investigations by modern techniques, including cerebral angiography in two, were negative. All their patients improved after the administration of methysergide, ergonovine maleate or propranolol. Murray (1979) reported similar therapeutic success with pizotifen and propranolol in 11 patients with carotidynia.

All the patients in the present series except two were women over the age of 70 years, and all of them had carotid artery tenderness. Seven patients responded to pizotifen 500 μg three times a day; one patient felt sleepy and stopped taking the drug, but improved on methysergide. Two patients had a history of migraine in their reproductive period. None had any recurrence during the 6–8 months follow-up.

The relationship between carotid pain syndrome and migraine remains speculative. Roseman (1967) suggested that carotidynia may be a manifestation of migraine, minus the photosensitivity and gastro-intestinal symptoms. Response to drugs recommended for prophylaxis of migraine may suggest a similar pathogenesis.

To the author's knowledge, this is the only report where all the patients are elderly.

Conclusion

In conclusion, carotidynia is a distinct syndrome. Failure to recognize this condition has resulted in protracted unnecessary investigations and the transfer of patients from one clinic to another until ultimately they are labelled as suffering from psychialgia.

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