Smoking

Hypertension, obesity, smoking, and cerebral small vessel disease were important factors associated with non-lesional spontaneous intracerebral hemorrhage in young patients. Radiologic changes corresponding to cerebral small vessel disease appeared in young patients (in their 30s) and they were associated with hypertension ¹⁾.

In a systematic analysis, disparities in Lip, oral, and pharyngeal cancer burden existed across the Socio-demographic Index spectrum, and a considerable percentage of the burden was attributable to tobacco and alcohol use. These estimates can contribute to an understanding of the distribution and disparities in Lip, oral, and pharyngeal cancer burden globally and support cancer control planning efforts²⁾

Compared with never smoking, persistent smoking after acute ischemic stroke was associated with an increased risk of cardiovascular events and death $^{3)}$

95 % of small-cell lung cancer arise in proximal airways, usually in mainstem or lobar brochii. Tipically younger (27-66 years) than other lung cancer. Strongly associated with cigarrete smoking

Cigarette smoke (CS) contains several carcinogens known to initiate and promote tumorigenesis and metastases. Because various genes that mediate carcinogenesis and tumorigenesis are regulated by nuclear factor kappa-B (NF-kappaB), Anto et al., postulated that the effects of CS must be mediated through activation of this transcription factor ⁴).

Kamal et al. conducted a meta-analysis to address the outcomes in cancer patients after oncologic surgery during the COVID-19 pandemic. The primary endpoint was the COVID-19-related mortality rate. Higher body mass index was significantly and negatively associated with higher all-cause mortality and in-hospital COVID-19 infection rates. Male sex, preoperative respiratory disease, and smoking history were positively and significantly associated with increased all-cause mortality rates. Furthermore, male sex was positively and significantly associated with the COVID-19 infection rate ⁵⁾.

Smoking and aneurysm rupture risk factor

see Smoking and aneurysm rupture risk factor.

The intravenous thrombolysis-treated stroke patients with unruptured intracranial aneurysms were more often current smokers and had higher systolic blood pressure than the matched patients

without UIAs. They were as likely to have unfavorable outcomes at 3 months but seemed less likely to achieve excellent outcomes and were more likely to have higher mRS in shift analysis ⁶⁾.

Intraventricular hemorrhage

Very low birth weight (VLBW) infants (< 1500 gm), cocaine-exposed infants were at increased risk of intraventricular hemorrhage, were more likely to be placed outside maternal care, and had higher incidences of cognitive and motor delays at follow-up. Cocaine-using women were also more likely to use other drugs, especially alcohol, marijuana, and tobacco⁷⁾.

In a analysis, intraventricular hemorrhage and tobacco use were associated with symptomatic vasospasm⁸⁾.

Vasospasm

Tobacco use and a history of diabetes mellitus were associated with vasospasm⁹⁾.

CT-evident SAH, left ventricular hypertrophy (LVH), cigarette smoking, and hypertension are associated with vasospasm. In smokers or hypertensive patients, premorbid LVH appears to predict much more severe vasospasm ¹⁰.

Cocaine users were younger than control, and were more likely to smoke tobacco, drink alcohol, and have renal dysfunction ¹¹.

Sciatica

Smoking is a modest risk factor for lumbar radicular pain and clinically verified sciatica. Smoking cessation appears to reduce, but not entirely eliminate, the excess risk ¹²

Spine surgery

Microdecompression for lumbar spinal stenosis

There are limited scientific data on the impact of smoking on patient-reported outcomes following minimally invasive spine surgery.

Nonsmokers experienced a significantly larger improvement at 1 year following microdecompression for LSS compared to smokers. Smokers were less likely to achieve a minimal clinically important difference. However, it should be emphasized that considerable improvement also was found among smokers ¹³.

Lumbar disc herniation

Considering sex, smoking and heavy works as predictors of recurrent lumbar disc herniation (LDH),

surgeons should advice their patients to limit hard work and put away smoking especially in tall and male ones to prevent LDH recurrence $^{14)}$.

Smoking was the strongest predictor of reoperation in patients who had undergone single level laminectomy, multilevel laminectomy, or reoperation for progression of Degenerative spine disease. These findings suggest that smokers have worse outcomes of lumbar decompression than nonsmokers ¹⁵⁾.

In postlaminectomy pseudomeningocele a retrospective analyses of six cases was made including: clinical signs and symptoms, radiological findings, and possible therapeutic modalities.

In every case, there was a palpable fluctuating mass under the surgical scar, sensory loss in both low extremity, and limited leg raising; moreover, heel tapping produced pain. Also, every patient had a history of long standing cigarette smoking and multiple spinal surgeries. Radiologically dural saccular or tubular structures were noted at myelograms, magnetic resonance imaging, or computed axial tomography scan, usually at the site of the surgery. In one patient with metallic devices, diagnosis was made by ultrasound ¹⁶.

Compensation claims and smoking had very significant adverse impacts on both employment and pain results despite high fusion rates, particularly in patients under the age of 55 years ¹⁷⁾.

Spinal cord injury (SCI)

Cotinine, a main metabolite of nicotine, has harmful effects on SCI via GFAP and CNP expression. The findings of the present study support the hypothesis that tobacco causes neuronal degeneration via cotinine ¹⁸⁾.

Traumatic Brain Injury

A study found that pre-injury vascular risk factors, especially smoking, are associated with worse outcomes after TBI. Aggressive post-injury treatment of vascular risk factors may be a promising strategy to improve Traumatic Brain Injury outcomes ¹⁹.

Head circumference

Exposure of nonsmoking pregnant women to environmental tobacco smoke (ETS) is associated with a number of adverse perinatal outcomes including lower birthweight, smaller head circumference and stillbirth, as well as shorter birth length. This information is important for women, their families and healthcare providers, and reinforces the continued need for increased public policy and education on prevention of exposure to ETS ²⁰.

Effects of cigarette smoking on clopidogrel

Effects of cigarette smoking on clopidogrel

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