Tell-tale signs of a chronic smoker

Sir,

Tobacco smoking is quite common in all sections of Indian society and two main forms of tobacco are cigarette and biri. Biri is formed by stuffing tobacco inside tendu leaves and tied with a thread at one end. Biri has no filter, and to keep it burning one has to take an average of 28 puffs as opposed to 10 in a cigarette. Heavy smokers and chronic smokers have many reliable clinical signs that point towards their habit of smoking, and can be handy in suspecting and diagnosing chronic obstructive airways disease (COAD) at an early stage, even if the patient denies smoking. In this work, we present a list with description of various clinical signs of smokers. Some of the signs (e.g., Chingari sign) may be more specific for biri smokers, whereas others are seen with any type of smoking.

Tell-tale signs of smoking

1. Stains
   a. Nails and fingers: Nails and fingers of smokers may take a yellow stain due to repeated exposure to smoke and tar in smoke.
   b. Moustaches: Moustaches especially is elderly with white hair show a clear pattern of yellowing in centre showing chronic exposure to smoke [Figure 1].
   c. Lips: Lips have a bluish-black discoloration in heavy smokers.
   d. Teeth: Teeth of smokers show brownish black staining from inside and yellow discoloration from outside.

2. Burns
   a. Clothes: 'Chingari sign': Clothes of biri smokers have numerous holes due to sparks (Chingari in Hindi) arising from burning of biris over many months [Figure 2].
   b. Fingers: Fingers of biri smokers may show burn marks due to repeated exposure to matchsticks used to burn biris.

3. Skin changes
   a. Premature wrinkling: 'Crows feet', 'cobblestone

Figure 1: Moustaches of an elderly person showing yellow stain more in the center where smoke is exhaled from nose, a sure sign of heavy smoking

Figure 2: Shirt of a patient showing multiple tiny holes produced by the sparks ('Chingari' in Hindi) originating from the Biri smoking (Biri is tobacco rolled in Tendu eaves). It is the most prevalent form of smoking in India and this sign is called 'Chingari Sign' seen only in Biri smokers

Figure 3a: A typical "smoker's face" showing dryness of skin, wrinkles originating from the sides of eyelids running up to cheek called "crow's feet", wrinkles in front of the ears, and wrinkles running down the neck behind the ears

Figure 3b: Cobblestone-shaped wrinkles in the side and back of the neck of a smoker, a feature of heavy smoking over prolonged duration

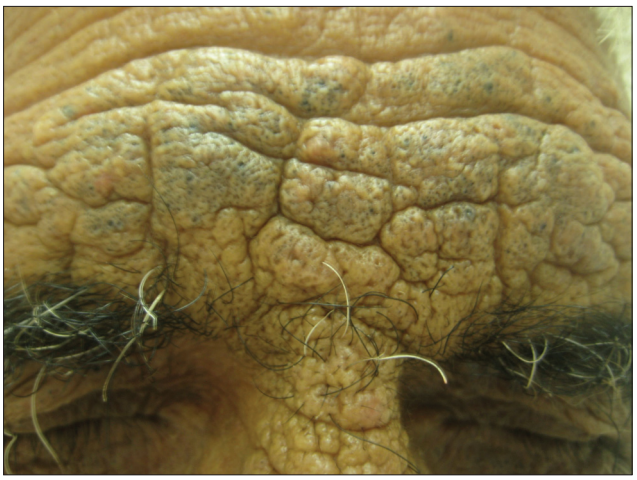

Figure 4: Favre–Racouchot syndrome: showing multiple open and closed comedones (black heads) over forehead and furrowed wrinkled skin, produced by chronic sun exposure and heavy smoking

wrinkles', 'smoker's face': The term smoker's face was coined by Dr. Douglas Model in 1905 in an article published in British Medical Journal.[1] His observation was that half of the long-term smokers (>10 years) had similar skin features in face irrespective of age, sun exposure, or weight. Toxins from smoke caused constriction of blood vessels, presence of carbon monoxide reduced oxygen delivery to skin, and direct exposure of facial skin to smoke caused dryness and irritation. In addition, nicotine has some diuretic effect to reduce the skin moisture. Crow's feet [Figure 3a] is the prominent lines and wrinkles starting from the corner of the eyes. Cobblestone wrinkles [Figure 3b] are wrinkles that run down at the back of the neck. Smokers also produce matrix metalloproteinase in excess, which degrades collagen and skin loses elasticity as a result.[2]

b. Nodular elastosis of skin with comedone formation: "Favre–Racouchot syndrome" [Figure 4].

The disease was originally described by Favre in 1932 and reviewed in detail by Favre and Racouchot in 1951.[3,4] This disease is a cosmetic concern and is caused by chronic excessive exposure to ultraviolet (UV) light in sun and is strongly associated with heavy cigarette smoking.[5] The association with smoking has been found to be even stronger than UV light.

Multiple open and closed comedones are present in the periorbital and temporal areas with yellowish discoloration, yellowish nodules, atrophy, wrinkles, and furrows. The eruption is usually bilaterally symmetrical. No inflammation is present, unlike the comedones seen in acne vulgaris.[6]

4. Smell of smoke
   a. Heavy smokers have a typical smell of smoke in their clothes, breath, hands, and can easily be detected by this smell. The smell may vary depending on the type of cigarette they use. So, if in doubt regarding the history using your smelling power may be worthwhile, especially in adolescents.

Association of these signs with diseases

Facial wrinkling and association with chronic obstructive pulmonary disease (COPD):[7] In a recent study on chronic smokers, the investigators found statistically significant correlations between facial wrinkling and both low FEV_1 and extensive disease on computed tomography (CT). The authors suggest that genetic susceptibility might be the mechanism behind this correlation: Smoking might activate metalloproteinases in susceptible individuals, or such individuals might have defective repair mechanisms affecting both skin and lungs. If we are able to detect the signs in skin such as Crow's feet on face in smokers at an early age, we can alert these patients regarding high likelihood of development of COAD because of common proposed mechanism for both processes, that is, destruction of airways and wrinkling of face by activation of metalloproteinases by smoking. We can also get their pulmonary function tests or chest CT to detect COAD at an early stage.

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