Vascular changes are frequent during pregnancy, and occur to a variable extent in women. The changes include distension, instability, and proliferation of vessels [38]. The main clinical results of these abnormalities are spider angiomata (nevi aranei) and palmar erythema [35]. Other commonly seen abnormalities are flushing of the skin and temporary edema of the face, hands, and feet [24]. Most rare are small hemangiomas of subcutaneous cavernous type which disappear shortly after delivery [24].

Some of the vascular changes are used as diagnostic features of pregnancy. Erythema of the vestibule and vagina, called the Jacquemier–Chadwick sign, results from distension of their vasculature, and occurs early in gestation [19, 38]. The bluish discoloration of the cervix, known as the Goodell sign, is also a result of increased vascularity, this time of the cervix [7].

The most remarkable vascular change is simply general vascular increase throughout the dermis. This can lead to significant blood loss encountered by a simple incision in the skin of a pregnant woman [7], and this tendency may jeopardize the course of a cesarean section [7].

5.1 Vascular Spiders (Spider Angiomas, Arterial Spiders, Nevi Aranei, Spider Nevi)

Spider nevi are seen in 10–15% of normal white, nonpregnant women. During pregnancy their number markedly increases, and they are found in about 70% of whites and 10–15% of blacks [13, 24, 40]. The prevalence of vascular spiders in pregnant women reported by Bean [3] in a large series was 67% among whites and 11.3% among blacks by the third trimester. Esteve et al. [9] reported that 32 out of 60 pregnant women developed vascular spiders, most of them appearing on the upper part of the body, and only one vascular spider was seen on the leg. In a study of 140 pregnant women from Lahore, Pakistan, by Muzaffar et al. [27], a very low incidence of spider nevi, 1.4%, was reported. This difference was credited in part to the dark complexion of the women, making the nevi less perceptible.
Spider nevi usually appear between the second and fifth months of pregnancy [13]. The study by Bean et al. [4] found that 14% of white women had spider angiomata by the second month of pregnancy, but African-American women developed them only after the fourth month of pregnancy. There is a tendency for them to increase in size and number until parturition [35]. Clinically, spider nevi appear as small, flat, or slightly raised lesions with a central, faintly pulsating, red punctum associated with small, radiating, telangiectatic vessels, and surrounding erythema, usually extending several millimeters beyond the visible vessels [35, 39]. The temperature of the skin overlying the spider nevi is warmer than that of the neighboring skin [28]. Pressure on the central point will produce blanching [29].

Spider nevi occur mostly in areas of skin drained by the superior vena cava, the neck, throat, face (particularly around the eyes), upper chest, arms, and hands (in that order) (Figs. 5.1, 5.2) and consist of a central artery containing muscle and glomus cells in its thick wall, arising from the subcutaneous arterial plexus [13, 24, 38, 39]. In the subepidermal zone the artery dilates into a thin-walled ampulla giving off delicate arterial branches which merge into the capillary bed [24]. Following delivery, their size and number gradu-