Details of histopathological findings for cases 1-3.

Case 1

The testicular nodule was composed of fibrovascular tissue with epididymis, deferent duct, and pampiniform plexus (Fig. 4). In the central area, remarkable fibrosis with small vessels was confirmed by blue staining with MT (Figs. 7 and 8). Some macrophages contained lipofuscin, which appeared as yellow-brown pigment granules that reacted with PAS (Figs. 9 and 10). A few hemosiderin-containing macrophages also were observed. In the peripheral area, there were numerous blood-filled arteries (Fig. 4). A few neutrophils and lymphocytes were observed between arteries and the area of fibrosis. Tubular structures, germinal cells, interstitial endocrine cells, and testicular sustentacular cells were absent.

Case 2

The testicular nodule was composed of fibrovascular tissue similar to case 1 (Fig. 5). In the central area, there was remarkable fibrosis in which a few macrophages contained hemosiderin that stained with Berlin blue (Fig. 11, inset) and lipofuscin. Many tubular structures consisting of cuboidal cells arranged in a mesh-like arrangement were observed in the fibrosis (Fig. 14). These tubules showed a lack of spermatogenesis, thickened basement membranes, hyalinization, and multifocal mineralization of the basement membranes. A few different tubules were formed by degenerate or necrotic cells characterized by clusters of eosinophilic amorphous substances lacking nuclei, and were lined by thick basement membranes (Fig. 15). The basement membrane of tubules was identified with PAS (Fig. 16). Some mineralization was also observed in the lumen of degenerated or necrotic tubules (Fig. 15). Germinal cells and interstitial endocrine cells were not observed in the fibrotic testicular nodule.

Case 3

On gross examination, testicular tissues were not clearly observed, but the end of the excised tissue was composed of fibrovascular tissue (Fig. 6). Epididymis was absent, but deferent duct and pampiniform plexus were present in the examined tissue (Table 1). Numerous blood-filled arteries and adipose tissue were observed in the peripheral area. Mineralization was found in the vessel walls (Fig. 12). There were small vessels and mild fibrosis with a few neutrophils, lymphocytes, and hemosiderin-laden macrophages in the tissue (Fig. 13). Tubular structures, germinal cells, interstitial endocrine cells, and testicular sustentacular cells were absent in the examined testicular tissue.