Author reply

Dear Editor:

We thank Dr Asadi Amoli for her interest in our article.[1] Dr Asadi Amoli pointed out that specific and sensitive rhabdomyosarcoma (RMS) markers should be investigated in our case.[2] We agree with Dr Asadi Amoli's opinion and are sorry that the results of pathology examination and myogenin (myf-4) staining studied in a local hospital were not provided in our case report.

An excisional biopsy in our case was performed by local ophthalmologists, and myogenin staining by the local pathologists was positive for tumor cells (figure 1 A). When the patient was referred to Zhongshan Ophthalmic Center, our pathologists reviewed the pathology examination, and the patient was diagnosed as conjunctival RMS. After surgery in our center, histopathologic examination showed the RMS cells staining for markers of desmin, muscle-specific actin and vimentin.

In our case, tumor was mostly composed of primitive round and spindle cells (figure 1 B) and scattered cells acquired abundant cytoplasmic eosinophilia and elongate shapes (figure 1 C), all of which were consistent with features of RMS.[3,4]

It is indicated that immunochemical staining provided further support for the histogenesis and diagnosis of RMS. Only vimentin is present in the most primitive cells. Desmin and actin are acquired by developing rhabdomyoblasts, and differentiated cells express myoglobin which is specific for striated muscle.[3] Nevertheless, myoglobin was not highly sensitive to RMS. Positive immunostaining for nuclear MyoD and myogenin is found to be highly specific and sensitive to RMS.[3,5] In our case, vimentin, desmin, muscle-specific actin and myogenin, all of which were positive in our case, provided further support for the histogenesis and diagnosis of RMS.

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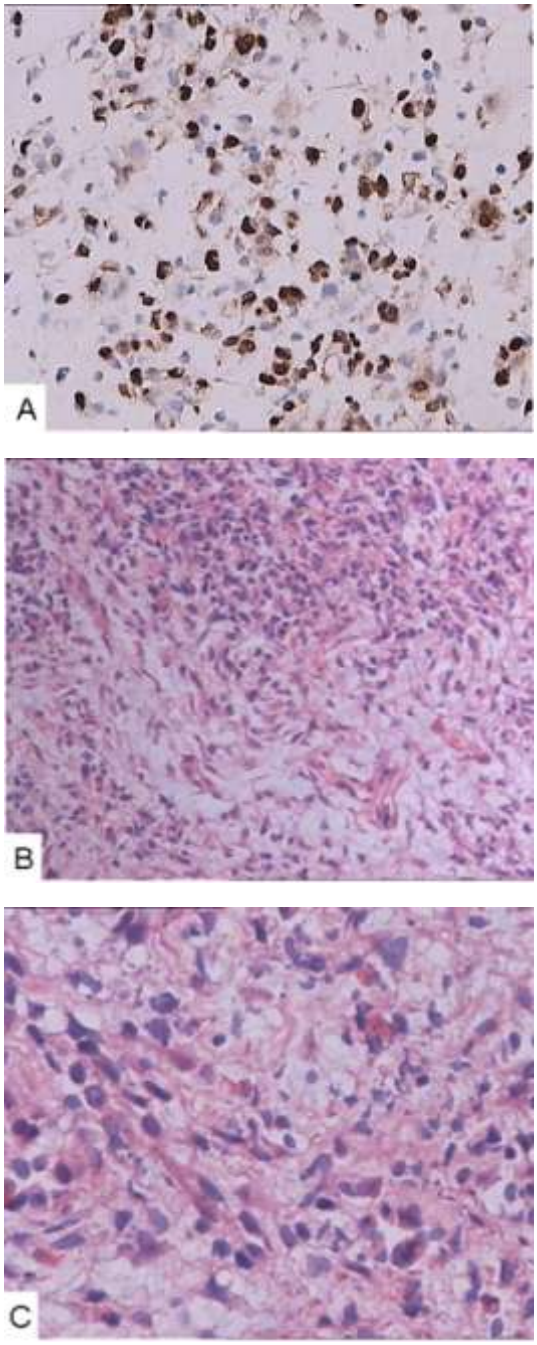

Figure 1. A 4-year-old boy with primary conjunctival rhabdomyosarcoma. (A) Strong positive nuclear immunostaining for myogenin (Original magnification ×400). (B) Numerous round and spindle rhabdomyoblasts with brightly eosinophic cytoplasm (Hematoxylin-eosin ×200). (C) Scattered tumour cells with more cytoplasmic eosinophilia and elongated shapes (Hematoxylin-eosin ×400).

References

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