



*Fig. S1.* Changes in dermoscopic features of longitudinal melanonychia (LM) over time in cases (a) 4, (b) 6, (c) 10 and (d) 14. The discrimination index (DI) value at each observation time is also shown. In cases 4 and 6, dermoscopic images showed broad, irregular LM, mimicking that found in nail apparatus melanoma *in situ* in adults. This could cause difficulties in diagnosis. The use of the DI to monitor changes over time provides objective data that can be used to guide diagnosis. (a) Case 4. A 10-year-old Japanese girl presented with light-brown LM of the right fifth fingernail that had been present since the age of 7 years. Although the DI at the first visit far exceeded the threshold value, as she grew older, it decreased steadily, finally reducing to below the threshold value at the age of 13 years. (b) Case 6. A 5-year-old Japanese girl presented with dark-brown LM of the right first fingernail that had been present since she was 2 years old. The DI at the first visit was below the threshold value. Thereafter, it increased to a maximum value far above the threshold before gradually decreasing to a value near the threshold. (c) Case 10. An 18-year-old Japanese boy presented with light-brown LM of the right first fingernail, present since he was 16 years old. The DI fluctuated between observations, but consistently stayed above the threshold value. (d). Case 14. A 13-year-old Swiss boy presented with LM of a fingernail. The DI remained below the threshold, but initially increased before gradually decreasing, showing a pattern of change similar to that of case 6.