A 60 year old male with type 2 DM presented to the outdoors with complaints of blackening of fingers & non healing ulcer on his right thumb for past 6 months. He presented to our OPD for his routine follow-up examination with complaints of a progressively worsening infected right thumb ulcer for over six months (Figure 1). Patient also admitted to having pain and foul smelling discharge from the ulcer. Patient denied any tobacco or alcohol use. Physical examination was unremarkable except for an ulcer on the thumb of his right hand measuring 2 cm*3 cm with an ulcerated area at the base PIP of the thumb. The ulcer was necrotic, black with bleeding and minimal purulent drainage. The patient was started on oral antibiotics with local wound care and surgical consultation obtained. Outpatient surgical evaluation revealed a black eschar with punctuate areas of bleeding after the removal of the eschar. The patient was admitted to the hospital for surgical debridement of the presumptive diabetic necrotic ulcer. Laboratory studies including C-reactive protein (CRP) were within normal limits. Patient is a known case of type II DM for last 6-7 years with good glycemic control on OHA. Fasting blood sugar was 92 mg/dl & post prandial was 156 mg/dl. Liver and kidney functions were normal. Viral markers were negative. CXR and ultrasound abdomen were within normal limits. His HbA1C was 6.3% indicating excellent control of his diabetes. Radiographic studies of the hand showed soft tissue and bony involvement, however there were no signs of osteomyelitis. In the operating room under careful examination, the edges of the lesion were irregular with hyperpigmentation highly suggestive of a malignancy. An excision biopsy with 2 mm margin was sent for frozen section and pathology evaluation. Pathologic diagnosis was nodular malignant melanoma. The tumor had an ulcerated surface that permeated the papillary and reticular dermis with permeation of subcutaneous tissue. A definitive procedure was subsequently performed that included en bloc amputation and wide excision of the previously excised melanoma along with sentinel lymph node biopsy after localizing the node with radioscintigraphy. Patient’s sentinel lymph node biopsy was positive for lymph node metastasis.

Nodular melanoma is an invasive form of melanoma. Melanoma is a potentially serious skin cancer that arises from pigment cells (melanocytes). In nodular melanoma, malignant melanoma cells proliferate downwards through the skin – this is known as vertical growth. The lesion presents as a nodule (lump) that has been rapidly enlarging over the previous weeks to months. It can arise de novo in normal-appearing skin, or within an existing melanoma of other type. A nodular melanoma can penetrate deeply within the skin within a few months of its first appearance. Nodular melanoma accounts for about 15% of melanoma in Australia and New Zealand. Although more common in very fair skin, it may also occur in those who tan quite easily, and occasionally in brown or black skin. Nodular melanoma is more common in males than females. Most are over the age of 50 when it is diagnosed. The main risk factors for nodular melanoma are: Increasing age, Previous invasive melanoma or melanoma in situ, Many melanocytic naevi (moles), Multiple (>5) atypical naevi (funny-looking moles), Fair skin that burns easily. Nodular melanoma may arise on any site, but is most common on exposed areas of the head and neck. Nodular melanoma presents as a rapidly enlarging lump (over several weeks to months). The characteristics of nodular melanoma include: A) Larger size than most moles >6 mm and often a centimetre or more in diameter B) Dome-shaped, often symmetrical firm lump C) Single colour or variable pigmentation – most often black, red or skin coloured D) Smooth, rough, crusted or warty surface E) Ulceration or bleeding F) Itching or stinging. One-third of patients will have positive lymph node metastasis.
nodular melanomas are not pigmented. They lack the ABCD melanoma warning signs. (Asymmetry, Border irregularity, Colour variation, large diameter.)

References