An accessory parotid gland (APG) is an anterior extension of the parotid gland found in 21–69% of cadaveric cases [2, 3-5]. It usually ranges in size from a pea to a kidney bean and has a flattened appearance resulting from compression between the masseter muscle and skin [2, 4]. The accessory parotid glands have their own blood supply from the transverse facial artery and have secondary duct emptying into the Stenson’s duct. [6] There are two types of anterior extension of the parotid gland: one is facial process which is attached to the main gland. The other is accessory parotid gland, which is detached from the main gland. The average distance of accessory parotid glands from the anterior edge of the main gland is about 6 mm. However, the farthest reported APG was found on the buccal pad of fat at the anterior border of the masseter muscle, suggesting a great v Histologically the accessory parotid gland and the main gland are similar so pathology of the main gland could also involve the accessory parotid gland. Although tumors arising from an APG represent only 1–8% of all parotid gland tumors, 26–52% of all APG tumors are malignant, which is a much higher rate compared to the < 20% malignancy rate for tumors of the main parotid gland. [4, 5] Failure to remove a distantly detached accessory gland during parotidectomy could lead to tumor recurrence. So, here lies the importance of the knowledge of APG, as a complete parotidectomy can be hindered by missing an APG. As well as clinical suspicion and awareness of APGs are important to establish appropriate management plans for mid-cheek masses and to differentiate them from other soft-tissue masses, such as an epidermoid cyst, lipoma, hemangioma and lymphangioma. 

Figure 1: Showing accessory parotid gland (APG) along with main parotid gland (MPG) and peripheral branches of Facial nerve-TN-temporal nerve; ZN- zygomatic nerve; UBN-upper buccal nerve; LB TMP lower buccal nerve; MMN- Marginal mandibular nerve and CN- Cervical nerve; SD- Stenson’s duct; ATN- Auriculotemporal nerve; STV- Superficial temporal vein.

Figure 2: Showing distance between retromandibular vein (RMV) and marginal mandibular nerve (MMN)

DISCUSSION
Accessory parotid gland tumors were reported in 1–7.7% of all the parotid gland tumors [4, 5]. For surgical treatment, these tumors can be approached through either of two incisions i.e. standard modified Blair’s incision or mid cheek incision. In mid cheek incision, the tumors are approached through a limited incision over the tumor in the middle of the cheek. This approach is associated with a
The various landmarks used for parotidectomy are facial nerve trunk and its branches, retromandibular vein, angle of mandible, marginal mandibular nerve and buccal branch of facial nerve. We found the distance from the zygomatic bone to the buccal neve, from retromandibular vein to marginal mandibular nerve and from angle of mandible to marginal mandibular nerve were 34.9mm, 9.23mm and 7.85mm respectively which were slightly less as compared to the findings of W.Zhong et al [7]. Appropriate landmarks may be used during parotidectomy if any one of the landmark is obscured by growth of the tumor.

Researchers have found that the distance of APG from the main gland ranged from 1 to 37mm [2, 8] but in our case APG was almost continuous with the main gland. This can be explained on the basis that an APG is a kind of developmental variation of a premature parotid gland, and as the main parotid gland matures and develops with age, the APG would become fused with the main parotid gland, becoming a facial process. Indeed, the weight and volume of the parotid gland usually increase with increasing age; thus an APG can become a facial process as the parotid gland grows large enough to be continuous with the APG [9]

The size of APG reported by other authors was less as compared to ours which was much larger, measuring 35 X 23 mm. [2] It was almost continuous with the main gland and reaching up-to the anterior margin of the masseter muscle.

There was only one duct draining the gland. However, cases with two separate ducts, one from main parotid gland and other from accessory parotid gland draining separately or APG draining through accessory duct into the Stenson's duct were reported. [6, 10] In our case the length of the Stenson's duct was higher compared to other researchers. [2,10] Wangyong Zhu et al have reported that the Stenson's duct was significantly longer in patients with parotitis as compared to the healthy subjects.

Thus APG is a normal anatomical extension of main parotid gland which is more prone to any pathology. Surgeons should be careful while exposing APG during parotidectomy because of its close proximity to facial nerve branches and select appropriate anatomical landmarks.

CONCLUSION
An accessory parotid gland can be misdiagnosed as lipoma, cyst or hemangioma due to lack of appropriate knowledge. So, we believe that this case report will add to the literature of accessory parotid gland and will aid as an anatomical guide to the surgical intervention involving parotid gland.

REFERENCES