

Vocal cord paralysis after total thyroidectomy with ecchymosis secondary to thyroid biopsy

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Dear Editor,

A 52-year-old female patient was accepted in our clinic due to multi-nodular goiter. She was a housewife and was living in a village about 100 km from our state hospital. Because of the fact that the arrival and departure of the hospital was difficult for them, the patient was hospitalized and she wanted to be operated as quickly as.

We thought we would postpone the operation, but we couldn't postpone the patient's economic situation due to social reasons. She said that if not operated now she can't come any time to the hospital again.

On physical examination, the thyroid gland was hyperplastic. Thyroid hormone levels and biochemical parameters were normal.

The thyroid gland was hyperplastic in the thyroid gland and there were multiple solid nodules in both lobes, the largest of which had calcifications in the right lobe of approximately 6x4 cm in size. The patient was consulted to the Department of Endocrinology and fine needle aspiration biopsy (FNAB) was performed with USG. Biopsy results were reported as unclear atypia. The patient was taken to the operation 2 days after the FNAB.

Her right middle neck on the skin about 5x5 cm ecchymosis area. Biopsy was performed near the anterior jugular vein. We could not use nerve monitoring because of our hospital facilities. It was considered secondary to hemorrhage after FNAB. In operation we difficultly explore the right recurrent laryngeal nerve (RRLN) and parathyroid gland. The normal color was changed. The anatomic appearance of the left lobe of the thyroid was normal and the left recurrent nerve (LRLN) was explored. Bilateral total thyroidectomy was performed. The right recurrent

laryngeal nerve was not observed. In the postoperative 2nd hour, the patient underwent tracheostomy because of bilateral vocal cord paralysis in indirect laryngoscopy. The paralysis in the left vocal cord was thought to be with thermal effect. Indirect laryngoscopy performed at the 9th month of follow-up revealed a left vocal cord. Tracheostomy was closed. In the second year of follow-up in the patient who had respiratory distress with hoarseness and exertion, paralysis in the right vocal cord was observed. Calcium levels are normal preoperation and post operation.

Although the FNAB is an invasive method, it is considered to be good by patients because it is simple, accurate and safe (4), complications are rarely and typically seen in minor characters during the procedure (9). Localized pain and hemorrhage / minor hematoma are the most common complications after FNAB (4). Recurrent laryngeal nerve an important and catastrophic complication of thyroid surgery (5). Nerve damage may be temporary or permanent unilateral or bilateral (6). The exploration of the recurrent laryngeal nerve during thyroid surgery is one of the most important procedures to reduce nerve damage (7).

We evaluated in our case who underwent total thyroidectomy during ecchymosis secondary FNAB. The patient was performed total thyroidectomy two days after the thyroid FNAB. In operation, normal color of the gland was changed. So we could not explore well. Complications are rare, but the most common complication is hemorrhage and minor hematoma (4). Determining the gold standard nerve in avoiding RLN injury during thyroid dissection (8). In our case, thyroidectomy was performed while ecchymosis so the right recurrent laryngeal nerve could not explore well and damaged and permanent right vocal cord paralysis was considered.

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We did not find any case with total thyroidectomy when ecchymosis was found secondary to minor hemorrhage after thyroid FNAB was performed in literature. Ecchymosis caused the recurrent laryngeal nerve exploration is difficult.

The purpose of this case is to keep in mind that there is no such case in the literature and that it is necessary to be more careful in early operations after fine needle aspiration. We have learned that we should be more careful and not behave emotionally in patients with social indication so we can prevent these unwanted complications.

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