Netherlands
The Journal of Medicine

PHOTO QUIZ

Exudative retinal detachment

M. Zhu[1], A. Tang[2], N. Amatya[3], L. Qiu[1]*

Department of Diagnostic Ultrasound, Ophthalmology, Radiology, West China Hospital of Sichuan University, Sichuan, China, *corresponding author: tel.: +86 02881899311, fax: +86 02885423192, e-mail: zhumengjiaoer@yahoo.com

On 6 February 2010, a 50-year-old female patient was admitted to a local hospital complaining of sudden dropping of the left eye's visual acuity. B-scan ultrasonogram showed retinal detachment but failed to demonstrate a solid subretinal mass. A few days later, the same patient complained of hoarseness of her voice. On 6 March 2010, the otolaryngologist found paralysis of the left vocal cord, through the laryngoscope. The patient was referred to our hospital for the blurred vision of the left eye and hoarseness of her voice. Her visual acuity was 20/20 in the right eye and HM/5 cm in the left eye. Ophthalmoscope revealed exudative retinal detachment (*figure 1*). Contrast-enhanced CT scan confirmed an enhanced lesion on the temporal side of the left eyeball with a dense central area. Ultasonography showed a mass of about 21x8 mm, 7 mm thick, without acoustic shadowing or gradual decay (*figure 2*). Meanwhile, the ribbon-shaped hyper-zone between the papilla optica and para-lens were seen. On 9 April 2010, the patient developed a lung infection; computed tomography (CT) of the chest demonstrated a mass in the hilum of left lung (*figure 3*). The biopsy was performed and the histopathology examination confirmed that the mass was small lung cell carcinoma.

Figure 1. *The exudative retinal detachment on the temporal side of left eyeball without retinal tears*

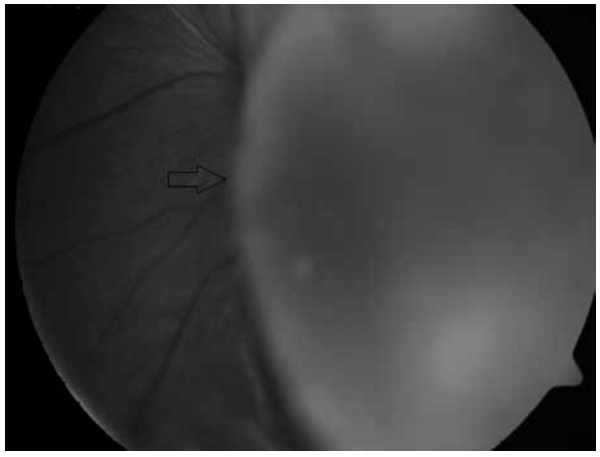

Figure 2. *Sonogram of the lesion with hyperecho ribbon-shaped*

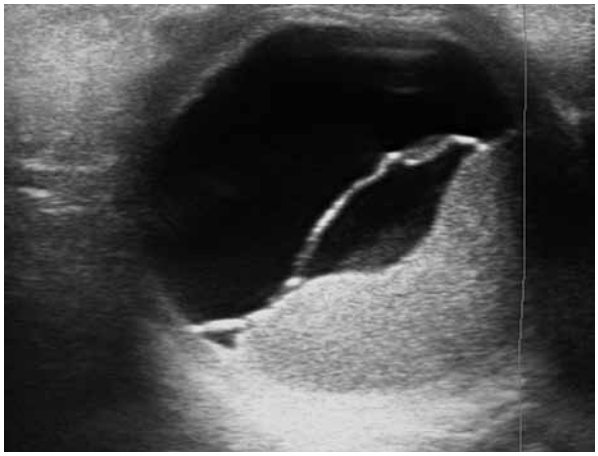

Figure 3. *Enhanced chest computed tomography revealed a large mass in the hilum of the left lung. The mass was diagnosed as small cell lung cancer by bronchoscopic biopsy*

WHAT IS YOUR DIAGNOSIS?

See page 530 for the answer to this photo quiz.w

ANSWER TO PHOTO QUIZ (PAGE 527)

EXUDATIVE RETINAL DETACHMENT

DIAGNOSIS

Symptomatic choroidal metastases from lung cancer are only found in a minority of patients.[1] Visual loss with retinal detachment is a rare clinical complication of small cell lung cancer.[2-4] To our best knowledge, this patient is unique in that she had choroidal metastases and exudative retinal detachment as the presenting sign of small cell carcinoma of the lung. The lesion radiologically mimics choroidal melanoma complicated with retinal detachment. The diagnosis is confirmed by bronchoscopic biopsy of the mass, which is shown to be small lung cell carcinoma through histopathology examination. The patient responded to systemic chemotherapy and radioactive plaque therapy. It should not be ignored that choroidal solitary mass might also originate from the lung. The aetiology and nature of the lesion should be well investigated, in particular when the vision loses expeditiously within a short period.

REFERENCES

1. Shields CL, Shields JA, Gross NE, Schwartz GP, Lally SE. Survey of 520 eyes with uveal metastases. Ophthalmology. 1997;104(8):1265-76.
2. Leys A. Choroidal metastasis and retinal pigment epithelial tear in a patient with small cell lung carcinoma. Retina. 2000;20(2):216-7.
3. Fernandes BF, Fernandes LH, Burnier MN. Choroidal mass as the presenting sign of small cell lung carcinoma. Can J Ophthalmol. 2006;41(5):605-8.
4. John VJ, Jacobson MS, Grossniklaus HE. Bilateral choroidal metastasis as the presenting sign of small cell lung carcinoma. J Thorac Oncol. 2010;5(8):1289.