Blindness secondary to central venous catheterization is very rare; possible mechanisms are venous thrombosis with paradoxical emboli, air emboli, or accidental arterial puncture” Agarwal et al (2015).

Abstract:

BACKGROUND: Parenteral nutrition (PN) via a central venous catheter is routinely used for surgical patients without a functioning gastrointestinal tract. Complications of PN can be metabolic and thrombotic. Blindness is a rare and unexpected complication.

CASE: A young female patient with postcorrosive pyloric stenosis was started on PN through an indwelling central venous catheter. On the sixth day of PN, the patient reported sudden painless bilateral complete loss of vision. Examination revealed bilateral normal-sized pupils with normal pupillary reaction. There was complete bilateral absence of visual acuity with no perception of light. Fundus examination was normal. Magnetic resonance imaging revealed an acute infarct in the left occipital lobe, left corpus callosum, and posteromedial aspect of the left thalamus. No cardiac source of the thrombus could be identified. After supportive treatment, the vision started improving after 3 days; recovery was 95% after 10 days. A feeding jejunostomy was performed urgently under local anesthesia, and 1 month of enteral nutrition was administered. One month after the event, the patient’s vision returned to normal. Definitive surgery in the form of antrectomy with Billroth II reconstruction was performed 8 weeks later.

CONCLUSION: Blindness secondary to central venous catheterization is very rare; possible mechanisms are venous thrombosis with paradoxical emboli, air emboli, or accidental arterial puncture. Clinicians must exercise caution while using PN. A high index of suspicion is required to diagnose and treat unexpected complications.

Reference:

Bilateral Blindness in a Young Girl Receiving Parenteral Nutrition: Case Report and Review of Literature. JPEN. August 19th.

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