$$\begin{aligned}\frac{1}{n}\sum_{i=1}^{n}\left(G(\check{\theta}^\top X_i)-\overline{G}(\check{\theta}^\top X_i)\right)^2 &\le 4C_G^2\left(\overline{C}_0\sum_{j=1}^{\mathfrak{p}}|\check{t}_{j+1}-\check{t}_j|^5\right)^{\gamma/2}\\ &\quad+4C_G^2\left(\frac{(T+1)\sqrt{\log n}}{n^{2/5}}\sum_{j=1}^{\mathfrak{p}}|\check{t}_{j+1}-\check{t}_j|^4\right)^{\gamma/2}\\ &=O_p(n^{-4\gamma/10})+O_p((\log n)^{\gamma/4}n^{-\gamma/5}n^{-6\gamma/25})\\ &=O_p(n^{-2\gamma/5}+(\log n)^{\gamma/4}n^{-11\gamma/25})=O_p(n^{-2\gamma/5}).\end{aligned}$$